Determination of Public Land (Rangeland) Health for 65034 WHITE LAKES-CROSBY

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. While habitat parameters may meet the Biotic standard, the habitat requirements for Special Status Species (lesser prairie chicken and sand dune lizard) habitat are a concern. Factors such as oil and gas activities and the associated infra-structure, the mesquite encroachment in some areas and the low composition of the tall grass species required for nesting success must continue to be addressed to improve the existing habitat and prevent lost of habitat from fragmentation.

There are scattered areas along the Cato Road corridor and within the road network within the heavier developed oil and gas areas that do not met the Upland standard. These areas exhibit excessive erosion caused by the poor maintenance of the road network.

With the exception of the above areas and based on the assessments, it is my determination that the other public land within the White Lakes-Crosby allotment #65034 meet the Upland Sites Standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species Standard. There are no public land Riparian areas on this allotment therefore this Standard was not addressed.

/s/ T. R. Kreager	09/28/2005
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 65034 WHITE LAKES-CROSBY Allotment
[12/03/2004]

The Roswell Field Office conducted rangeland health assessments at 13 study sites within the White Lakes Crosby allotment 65034. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
65034-APACHE-D098 (*)	X			X	*		N/A		
65034-BIG HORN GRAMA-D096	X			X			N/A		
65034-BIG HORN SAND-D097	X			X	*		N/A		
65034-CHUMLEY #5-D080 (*)	X			X			N/A		
65034-E. PRESLER #4-D079	X			X	*		N/A		
65034-MESCALERO-D094	X	*		X	*		N/A		
65034-MIDDLE #1-D076 (*)	X	*		X	*		N/A		
65034-N. ANTELOPE #7-D082	X			X	*		N/A		
65034-PRESLER #3-	X			X			N/A		

D078 (*)									
65034-S. ANTELOPE #8-D083	X			X	*		N/A		
65034-WEANING #2-D077	X			X			N/A		
65034-WEST #6-D081 (*)	X			X	*		N/A		
65034-WHITE LAKES-D095	X	*		X	*		N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated on White Lakes-Crosby allotment #65034. Ten (10) of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments along with quantitative information from long-term monitoring studies on 13 trend plot locations throughout this allotment were utilized to make rangeland health determinations. These quantitative evaluations were performed by the Roswell Field office staff starting in the early 1980's. These data include ground and vegetative cover and composition, production, frequency, and ecological condition as calculated from these collections which have been scheduled approximately every 5 years.

Five different ecological sites were assessed on this allotment. All sites are in the Pecos-Canadian Plains & Valleys (CP-2), Major Land Resource Areas for New Mexico. Five sites are Deep Sand, two Sandy Loam, three Sandy Plains, two Clayey and one Shallow Sandy. Each site corresponds to a particular study area in a pasture.

Deep Sand ecological sites, East Presler, Mescalero, South Antelope and Big Horn Sand pastures all have a Roswell-Jalmar-RPD soil phase. This unit is on high terraces in the eastern part of the survey area with 0-25 percent slope and elevation between 3,900 ft/1,182 m and 4,100 ft/1,242 m. North Antelope Pasture is the remaining deep sand site with a Ratliff-Redona-RBA soil association, gently undulating on high terraces in the eastern part of the survey area. Slope is 0-2 percent with elevation between 3,800 ft/1.152 m and 4,300 ft/1,303 m. Indicators assessed rating Moderate were bareground, litter movement, annual production and invasive plants. Bareground was estimated at 50 percent exceeding the long-term average and ESD of 35 percent. Litter was piling against obstructions and in depressional areas. Annual production is approximately 1/2 of potential, but threeawn and shinnery comprise the majority. The bluestem component is down in composition. Mesquite is scattered, but not encroaching at this time. No livestock observed presently. All other indicators fall within normal ranges of variability with slight departures from parameters established.

East Presler Pasture covers 2,442 acres/989 hectares and rates the majority of indicators None to Slight and Slight to Moderate. Soil and hydrologic attributes for bareground and litter amount rate Moderate. Current estimates for bareground are 50 percent,

approaching and slightly exceeding the upper end of the range expected at 40 percent. The remaining ground cover readings were either shinnery oak (Quercus havardii) leaves or basal hits on vegetation. Litter amount estimates were approximately 20 percent which falls in the bottom end for the range expected for the ESD of 30 and long-term average of 41 percent respectively. Functional/structural groups rated Moderate as the number of species were moderately reduced. Most notably sand bluestem (Andropogon hallii) and little bluestem (Schizachyrium scoparium) were reduced and/or missing in locations. Annual production and invasive plants both rate Moderate. An estimate of approximately 500 lbs/ac or kg/ha is 1/2 of the long-term average for this site. Invasive mesquite (Prosopis glandulosa) and some yucca (Yucca spp.) are scattered throughout but not encroaching. A good physical crust helps hold the soil in place with minor breaks in continuity.

Big Horn Sand Pasture an ecological site area of 659 acres/267 hectares also rates a majority of indicators None to Slight and Slight to Moderate. Indicators with soil and hydrologic attributes rating Moderate are pedestals and/or terracettes and bareground. Most pedestaling occurs on grass clumps located in flow paths and interspaces. Current estimate is 50 percent exceeding the ESD of 35, but matches the long-term average for the site. Functional/structural groups rates Moderate as well. Sand bluestem can only be found in isolated pockets with a reduction in little bluestem also. Annual production is currently estimated at 600 lbs/ac or kg/ha. This is approximately 50 percent of potential and falls well beneath the ESD for an average year. Invasive plants indicates mesquite is scattered throughout and therefore rates Moderate.

Mescalero Pasture rated most indicators Slight to Moderate with only minor deviations. This site covers an area of approximately 1,654 acres/670 hectares. Indicators of concern with soil and hydrologic attributes rating Moderate were pedestals and/or terracettes, bareground and litter movement. Pedestals were observed on grass clumps in flow paths, such as little bluestem and threeawn (Aristida spp.). No terracettes were observed however. Bareground is currently estimated at 50 percent slighlty exceeding the long term average and ESD of 41 and 35 percent respectively. Litter was found in scattered concentrations and against obstructions and in some depressional areas. Annual production rates as Moderate with approximately 60 percent of potential at 700 lbs/ac or kg/ha. Long-term average is 820 lbs/ac or kg/ha with an ESD figure of 2000 lbs/ac or kg/ha for normal years.

South Antelope Pasture encompassing an acreage of 2,022 or approximately 819 hectares also rates the majority of indicators Slight to Moderate with minor deviations from the long-term average and ESD. Bareground rates Moderate with a current estimate of 50 percent. This reading exceeds the ESD of 35 percent and is slightly higher than the long-term average of 45 percent. Functional /structural groups rates Slight to Moderate and relative dominance of some groups has been slightly modified. Little and sand bluestem can still be found in abundance here. Dropseed (Sporobolus spp.) and grama (Bouteloua spp.) were also encountered. Shinnery oak is up in abundance and comprises the majority of production. Annual production was estimated at 700 lbs/ac or kg/ha and rates Slight to Moderate. Mesquite is scattered and rates Moderate. Physical crusting was weak and

comprises only a minor portion of the interspace. This indicator rates Moderate. No livestock were observed at time of assessment. All other indicators fall within normal range of variability.

Weaning #2 Pasture is one of two CP-2 Clayey ecological sites. The soil is a Blakeney-Ratliff association, moderately undulating. It occurs on high terraces in the eastern part of area surveyed. Slope is 0-5 percent of elevations between 3,800 ft/1.151 m and 4,000 ft/1,212 m. Site is 853 acres/345 hectares in size. No livestock were present. Reclaimed oil and gas roads traverse the pasture with varying stages of revegetation. Most indicators assessed rated None to Slight and Slight to Moderate falling within normal ranges of variability. Functional/structural groups rates Moderate. Threeawn has replaced most other grass species and dominates.

Presler #3 Pasture is also a CP-2 Clayey ecological site. The acreage is 729 or 295 hectares. Soil is a deep well-drained Tucumcari clay loam on 0-2 percent slopes. Elevation is 4,000 ft/1,212 m to 4,200 ft/1,273 m. A majority of indicators assessed rated Slight to Moderate and None to Slight, falling within normal range of variability. Bareground however rated Moderate to Extreme. The current estimate of 60 percent far exceeds established parameters. Wind-scoured blowouts rates Moderate. Mesquite dunes are building and leaving some areas void of vegetation. Litter movement rates Moderate with litter piling up against obstructions and in depressional areas. Annual production is 40-60 percent of potential and rates Moderate. Mesquite is common throughout and has potential for further encroachment. Invasive plants rates Moderate to Extreme with snakeweed (Gutierrezia sarothrae) scattered also. The diversity of grass and forb species indicates good ecological condition.

Chumley Pasture, a CP-2 Shallow-Sandy ecological site, is on State land. The acreage is only 33 or approximately 13 hectares on a Faskin fine sand, 0 to 2 percent slopes. Elevation is 3,800 ft/1,151 m to 4,200 ft/1,272 m. The deep well drained soil formed in alluvial and eolian deposits on high terraces in the eastern part of the survey area. Indicators of concern are functional/structural groups, annual production and invasive plants. The grama grass component is missing for this site. Long-term compositional and production datum indicates blue (Bouteloua gracilis), sideoats Bouteloua curtipendula) and hairy grama (Bouteloua hirsuta) prevalent. Due to recent dry conditions and other factors, these species are practically gone. Threeawn is the grass continuously encountered. Now production minus the shrub component is only 1/3 of potential. An encroachment of mesquite is obvious here and common throughout. Although this site has some brush problems, the remainder of indicators fall within normal range of variability with only minor deviations from parameters established.

White Lakes Pasture, a CP-2 Sandy Plains ecological site is on 320 acres/130 hectares. The soil is a Faskin-Malstrom association, gently undulating. Slope is 0 to 2 percent on high terraces in the eastern part of area surveyed. Elevation is 3,900 ft/1,182 m to 4,100 ft/1,242 m. Indicators of concern rating Moderate are bareground, litter movement, soil surface resistance to erosion, annual production, and invasive plants. Bareground, estimated at 50 percent approaches the upper end of range. Long-term average and ESD

of 38 and 30 percent respectively has been surpassed. Litter has been displaced and is now piling in depressional areas and against obstructions. The interspace ped samples readily melted using the soil site stability test suggesting a reduction in organic matter throughout. A current estimate of 600 lbs/ac or kg/ha for annual production is 1/2 of potential and slightly less than long-term average. Mesquite is scattered on site and appears to have replaced the bluestem grass species in places. All other indicators rate None to Slight and Slight to Moderate and fall within normal range of variability.

Apache Pasture is a CP-2 Sandy Plains ecological site with an acreage of 969 or 392 hectares. Soil is a Faskin-Malstrom association. The majority of indicators assessed fall within normal range of variability and rate None to Slight and Slight to Moderate. There has been some reduction in grama grass and bluestem components. The impact of dry weather and other factors accounts for this reduction and rates functional/strutural groups Moderate. Annual production is 60 percent of potential estimated at 600 lbs/ac or kg/ha. Locoweed (Astragalus spp.), shinnery oak, mesquite and snakeweed comprise most of the production. Mesquite is common and encroaching towards dominating. No livestock were observed and this pasture is recovering.

Middle Pasture, the third of three CP-2 Sandy Plains ecological sites is on a Faskin soil. This site is adjacent to Cato Road and within the Cato Oil Field complex of wells. A total of 3,246 acres/1,314 hectares is encompassed here. Gullies are forming as a result of roads and traffic. Bed erosion is adjacent to these areas. Some headcuts are present with little or no vegetation to stabilize the enbankments. Gullies rates Moderate and don't appear to be recovering. Threeawn is gradually taking over the site and replacing bluestem and grama grass components. As a result functional/structural groups rates Moderate. Litter amount is slightly less than the long-term average at 20 percent for a current estimate. Invasive plants rates Moderate to Extreme with mesquite common. All other indicators rate None to Slight and Slight to Moderate falling within normal range of variability from established parameters.

West Pasture, the western most site on this allotment is one of two CP-2 Sandy Loam ecological sites. This site is 874 acres/354 hectares in size. This site also is on edge of shinnery oak/desert grassland complexes and exhibits characteristics from both. Chispa-Malstrom is the soil association, moderately undulating. Occurring on high terraces in the eastern part of area surveyed, elevations range between 3,800 ft/1,151 m and 4,000 ft/1,212 with slopes 0 to 4 percent. Indicators with ratings of concern are bareground (Moderate to Extreme), functional/structural groups, annual production and invasive plants all (Moderate). Bareground estimates are consistently at 60 percent and exceed the upper end of ranges expected by 25 percent. Bluestems and sand sage (Artemesia filifolia) are significantly reduced. Threeawn is gradually replacing these. Annual production is estimated at 600 lbs/ac or kg/ha. This is slightly below parameters established for ESD and long-term averages. Yucca (Yucca spp.) and mesquite are scattered throughout. Shinnery oak is producing leaves and adding to soil organic matter. The remainder of indicators fall within normal range of variability exhibiting None to Slight and Slight to Moderate departures from established parameters.

Big Horn Grama Pasture is the remaining CP-2 Sandy Loam ecological site. The acreage is 400/162 hectares for this site on a Sharvana fine sandy loam, dry, well drained and shallow. It formed in calcareous alluvium on high terraces in the eastern part of the survey area. Slopes are 0 to 2 percent. The majority of indicators assessed rate None to Slight and Slight to Moderate falling within normal range of variability. The grama grass component and vine mesquite (Panicum obtusum) is encountered with only slight reductions. The mat formed by these bunch grasses is leaving a mulch layer for adequate infiltration although litter is down presently and falls at bottom end of ranges expected. Forbs, croton (Croton spp.), globemallow (Sphaeralcea spp.) and locoweed add to diversity and non-grass composition. Mesquite is scattered but poses no immediate threat to encroach. This site is in good to excellent condition.

Hydrology -

Apache Pasture - The bareground indicator rated moderate. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. The litter amount rated moderate. The decrease in litter suggests that dry weather has negatively affected growing conditions reducing production. Additionally, the decrease in litter amount increases bare soil. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

Big Horn Pasture - The litter amount rated moderate. The decrease in litter suggests that dry weather has negatively affected growing conditions reducing the amount produced. Additionally, a decrease in litter can increase bare soil. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

Big Horn Sand Pasture - The pedestals and/or terracette indicator rated moderate. The recent dry conditions in combination with wind/water erosion has possibly reduced the amount of plant cover and decreased soil infiltration increasing pedestaling on plants and rocks. The litter movement indicator rated moderate. The decrease in litter movement suggests that dry weather has negatively affected growing conditions reducing the amount produced and it's mobility. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

Chumley Pasture - The rills, water flow patterns, pedestals and/or terracettes, bare ground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators rated none to slight and slight to moderate, indicating a healthy ecological condition.

E. Presler Pasture - The bareground indicator rated moderate. The amount of bare ground has possibly increased due to recent dry conditions and wind/water erosion processes. The litter amount rated moderate. The decrease in litter suggests that dry weather has negatively affected growing conditions reducing amounts produced. Additionally, a

decrease in litter can have an effect of increasing bare soil. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

Mescalero Pasture - The pedestals and/or terracette indicator rated moderate. The recent dry conditions in combination with wind/water erosion has possibly reduced plant cover and decreased infiltration into the soil which may have increased pedestaling on grasses and yuccas. The bareground indicator rated moderate. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. The litter movement indicator rated moderate. The decrease in litter movement suggests that dry weather has negatively affected growing conditions reducing amounts produced and it's mobility. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

Middle Pasture - The gullies indicator rated moderate with active erosion and gully formation taking place adjacent to existing roads. The increase in gullies has occurred because vegetation is very sparse and intermittent on slopes. The lack of vegetation has decreased infiltration and increased runoff. The litter amount rated moderate. The decrease in litter suggests that dry weather has negatively affected growing conditions reducing the amount produced. Additionally, the decrease in litter amount increases bare soil. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

N. Antelope Pasture - The litter movement indicator rated moderate. The decrease in litter movement suggests that dry weather has negatively affected growing conditions reducing amounts produced and it's mobility. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

Presler #3 Pasture - The bareground indicator rated moderate. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. The wind-scoured blowouts, and or deposition areas indicator rated moderate to extreme. The decrease in strength of physical soil crusts and/or absence, wind velocity, surface dryness and roughness, and reduced amount of surface plant cover has possibly increased wind-scoured, blowouts and deposition areas. There is mesquite dune building occurring. The litter movement indicator rated moderate. Decrease in litter movement suggests that dry weather has negatively affected growing conditions reducing amounts produced and it's mobility. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

S. Antelope #8 Pasture - The bareground indicator rated moderate, estimated at 50 percent. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. The physical/biological crust indicator rated moderate. There was a lack of physical soil crusts here. All other indicators rated none to slight and slight to moderate.

Weaning Pasture #2 - The rills, water flow patterns, pedestals and/or terracettes, bare ground, gullies, wind-scoured blowouts, and or deposition areas, litter movement, soil

surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators rated none to slight or slight to moderate, indicating a healthy ecological condition.

West #6 Pasture - The bareground indicator rated moderate to extreme estimated at 60 percent. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. All other indicators rated none to slight or slight to moderate.

White Lakes Pasture - The bareground indicator rated moderate with an estimate of 50 percent. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. The litter movement indicator rated moderate. The decrease in movement suggests that dry weather has negatively affected growing conditions decreasing the amount of litter that is produced and it's mobility. Soil surface resistance to erosion rated moderate, with soil site stability test showing a faster melting of interspace ped samples. All other indicators rated none to slight or slight to moderate.

Wildlife -

Evaluation of the integrity of biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as functional/structural groups and plant mortality & decadence.

In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation. A unique assemblage of terrestrial species and avifauna can be expected to use the Mescalero Sands ecosystem. Of significance are the lesser prairie chicken and sand dune lizard known only to occur within this ecosystem. The vegetation community of interest is the shinnery oak-tall grass type only found in this portion of the Field Office area.

Key habitat components include sand bluestem, shinnery oak, sand dune lizard habitat features (dune blowouts), and lesser prairie chicken habitat features (booming grounds & nesting areas). The amount, condition and juxtaposition of these habitat features are used as habitat indicators for this assessment.

Key attributes/indicators related to LPC habitat are Functional/Structural Groups, Annual Production, and Invasive Plants. Key attribute/indicators related to SDL habitat are Bare Ground, Wind-Scoured Blowouts, Deposition Areas and Annual Production. SDL are generally associated with blowouts that are unstabilized, i.e., microhabitats affected by the physical attributes of dunes and vegetation.

Other important wildlife species and their habitats, such as desert mule deer, pronghorn, a variety of game and non-game species, are considered in the assessment but not the focus

of the evaluation. The assessment begins by determining if the site is within "Core Areas" for lesser prairie chicken, or contains potential/occupied habitat for the sand dune lizard.

Weaning, Presler #3, Middle, Chumley and West Pastures - All are outside of designated LPC and SDL habitat in the western half of the allotment. These sites are primarily a short-grass prairie type west of the Mescalero Sands ecosystem . Because of the integrated nature of range sites over the landscape, some aspects of the shinnery oak community may be seen such as the presence of shinnery oak on sandy soil.

Weaning (clayey rangesite) is rated None to Slight for wildlife habitat/population since this grassland habitat type has not been invaded by mesquite. Presler #3 (clayey rangesite) and Chumley (shallow sandy rangesite) are rated Moderate due to the shift in habitat type from a grassland to a mesquite-dominated shrub grassland. Chumley Pasture is mostly State and private land. Middle Pasture (sandy plains rangesite) is located in the middle of heavy oil and gas development, exhibits habitat fragmentation and support wildlife populations tolerant to these developments and shifts in plant community structure. It is rated Moderate to Extreme due to a decline in habitat conditions, both vegetatively and from developments.

West Pasture is also outside of the LPC/SDL designated area, is located along the western portion of the allotment but includes a special habitat feature important to wildlife, Presler Lake. One of the few large playa lakes on public land. It is not within the rangesite established for the pasture. The lake is essentially ringed by mesquite and mesquite dune habitat. Otherwise, West Pasture exhibits characteristics of the sandy loam, sandy plains and deep sand sites as it is in a transition zone between the Mescalero Sands ecosystem to the east and shortgrass prairie type to the west. It is rated Moderate for wildlife habitat and populations due to the increase in mesquite and snakeweed and a downward trend in grass species abundance.

The following eight pastures are within the LPC core area. Three of the eight are not typical LPC/SDL habitat due to the ecological sites, but may exhibit some vegetative and soil aspects of a shinnery oak/tall grass community. Of importance are the last five pastures, all of which are Deep Sand rangesites and exemplify the shinnery oak/tall grass vegetation community supporting species unique to the Mescalero Sands ecosystem.

Because of the position of these eight ecological sites on the landscape and mobility of LPC, lek sites are available within the various pastures and include abandoned oil and gas pads and natural sites. Nesting habitat appears to be a factor that can be improved, specifically tall grass species such as sand bluestem in the Deep Sand site and to a lesser extent on other sites which may support shinnery oak and bluestem species.

White Lakes & Apache (sandy plains site) - Exhibits characteristics of the sandy loam, sandy plains and deep sand sites as it is in a transition zone between the Mescalero Sands ecosystem to the east and shortgrass prairie type to the west. White Lakes is rated Slight to Moderate for all wildlife indicators as the habitat type is transitional and leans toward the shortgrass prairie habitat type. Apache, leans more toward the shinnery oak/tall grass

habitat type, and is rated Moderate for all wildlife indicators due to the increase in mesquite and snakeweed and a downward trend in grass species abundance.

Big Horn Grama (sandy loam site) - Is within LPC core area but is not typical LPC habitat. It is mostly a mesquite grassland habitat type that is occasionally used for lek sites. The components of shinnery oak and tall grasses are not evident. A rating of Slight to Moderate for wildlife habitat and populations, and None to Slight for special status species and habitat.

Mescalero, Big Horn Sand, East Presler, North Antelope and South Antelope - Listed from north to south and located along the east half of the allotment. These are the Deep Sand sites that are within LPC and SDL areas. All pastures, except South Antelope, rate Moderate for all wildlife indicators due to the amount of sand bluestem in the composition, and for the possiblity of improving the composition of tall grasses to be maintained in the long run. South Antelope rated Slight to Moderate on all wildlife indicators and is in the best condition of the Deep Sand sites to date.

Cato Road Corridor

The Cato Road corridor runs south to north through the allotment and bisects multiple ecological sites and soil types; it is not associated with a particular assessment area but must be addressed due to the adverse conditions that presently exist. These conditions adversely impact watershed conditions within and adjacent to the road corridor.

In the professional opinion of the Assessment Team, public land within White Lakes-Crosby allotment #65034, meets Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See recommendations and site notes for further information regarding this ecological site.

The (*) indicates that the assessment had one or more indicator(s) rated moderate/extreme or extreme. These indicators are:

- Bare Ground
- Invasive Plants
- Wildlife Habitat

These indicators by themselves are not enough to rate the site as not meeting a standard but may warrant future monitoring.

Recommendations: The recommendation for this allotment is taking steps for mesquite reduction for those pastures that rate Moderate and above for invasive plants. Cato Road is not maintained at the moment and is beginning to form gullies and eroding at some stretches. Further non-use may help the bluestem and other vegetation recover for providing adequate prairie chicken habitat. Evaluation and future reclamation for

abandoned wells should continue to improve watershed conditions on this allotment and surrounding areas.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-APACHE-D098			
Legal Land Desc	SWNE 31 0080S 0310E Meridian 23	Acreage	969
Ecosite	070BY055NM SANDY PLAINS CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	03/14/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	FMA	Soil Taxon Name	FASKIN
Texture Class	NM644 LFS	Soil Phase	FASKIN-MALSTROM
Texture Modifier	NM644 LOAMY FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock are presently utilizing this pasture. A herd of pronghorn was observed traversing the far reaches of this site. The only other disturbance was the road which is in fair condition and improves farther from the bench to the upland.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						

S H	Pedestals and/or Terracettes				X	
Comments:	Some pedestaling occuring on grass plants.					
S H	Bare Ground				X	
Comments:	Estimations are currently 40% which is within the accepted range. Long-term average is 47%.					
S H	Gullies				X	
Comments:	Some erosion occuring on the road but no active headcuts or nickpoints.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Some displacement.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Slight reduction in interspace soil samples.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	At present only minor effects. Mesquite encroachment may affect this indicator in the future.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Abundance of bluestem species is reduced;replaced with grama grass component. Mesquite is also encroaching. Very little shinnery can be observed.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:	Litter amount falls in the bottom end of the range. New growth has not been given the chance to die back and form new litter, therefore very little litter is present. Most of the litter is observed in the dunal formations of the mesquite. Long-term average is 34%.					
B	Annual Production			X		

Comments:	Current estimate of 500 lbs/ac or kg/ha. Long-term average is 805 lbs/ac or kg/ha. ESD is 2250 which may be misinterpreted. Moderate is a fair rating.					
B	Invasive Plants		X			
Comments:	Mesquite is encroaching steadily and is common throughout.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusting is quite evident with some breaks in continuity.					
B	Wildlife Habitat			X		
Comments:	An undulating mixed shrub grassland habitat type with shinnery oak and increasing amounts of mesquite. Tall grasses appear to be in decline in this pasture.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species. Mesquite invasion has created a shrub-type grassland on this sandy plains rangesite. A decline in wildlife habitat is expected in the long run due to mesquite invasion. A general shift in the wildlife community based on habitat changes. Wildlife species tolerant to shrubs in the grassland community more common than those grassland species less tolerant to shrubs.					
B	Special Status Species Habitat			X		
Comments:	Within the LPC core area. This is in a transition zone between the shinnery oak/tall grass vegetation community and shortgrass prairie type. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. Nesting habitat appears to be a factor that can be improved, specifically tall grass species such as sand bluestem.					
B	Special Status Species Populations			X		
Comments:	LPC are known to occur in the area. A new lek site has been documented this past year, otherwise the area does not support a high density of leks. It is adjacent to other pastures that do have a high density of leks.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for

each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	1	8	2
B	Biotic	0	1	7	2	3

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info,* and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	1	10
Biotic		1	7	5

Site Notes: This site has the sand and little bluestem component reduced. The grama grasses like black, sideoats, blue and hairy have taken over the site, along with some threeawn. Mesquite is common throughout and is encroaching. Snakeweed is also in abundance suggesting an influence from the wet fall and spring. Astragalus can be observed throughout the pasture as well. No livestock are present, but pronghorn herds were observed.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-BIG HORN GRAMA-D096			
Legal Land Desc	NENW 6 0090S 0310E Meridian 23	Acreage	400
Ecosite	070BY054NM SANDY LOAM CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	03/14/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	ShA	Soil Taxon Name	SHARVANA
Texture Class	NM644 FSL	Soil Phase	SHARVANA
Texture Modifier	NM644 FINE SANDY LOAM,DR		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock are currently in this pasture. The two-track road is eroding especially at the bench point where it reaches the upland. There is gullying activity here. Pronghorn inhabit this area and surrounding vicinity.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						

S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground					X
Comments:	Now estimated at 20%, which is less than espected for the ESD at 35% and long-term average of 43%.					
S H	Gullies				X	
Comments:	The site is void of gullying, but the two-track road leading into the pasture has some gully formation. The slope from the upland toward the draw is probably the cause of this.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:	Some horizon loss.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Number of F/S groups with the Muhlenbergia spp. replaced by blue grama. Vine mesquite is also in abundance in some depressional araes. Forbs are abundant also. Astragalus was also observed.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:	Litter amount is very minimal. New growth from the previous fall has not deteriorated to litter as of yet. Falls at bottom end of the range.					
B	Annual Production				X	
Comments:	Long-term average for this site is approximately 700 lbs/ac or kg/ha. Now					

	estimated at 600-650 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Mesquite is scattered. Astragalus is also scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusting is evident with few breaks in continuity.					
B	Wildlife Habitat				X	
Comments:	A flat mesquite grassland habitat type on a high terrace.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species.					
B	Special Status Species Habitat					X
Comments:	Within LPC area. Shinnery oak and tall grasses are not part of this range site, so occasional use by LPC for lek sites appears to the the use of the area.					
B	Special Status Species Populations					X
Comments:	A lek site has been documented over the years and is inactive, the area does not support a high density of leks.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	1	4	6
B	Biotic	0	0	2	5	6

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need*

More Info, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	1	10
Biotic		0	2	11

Site Notes: No livestock are in this pasture at the present time. Pronghorn herds are quite evident. This site has a healthy grama grass component along with forbs making up most of the vegetative ground cover. Astragalus however is scattered throughout.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-BIG HORN SAND-D097			
Legal Land Desc	SENE 12 0090S 0300E Meridian 23	Acreage	659
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	03/14/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	RPD	Soil Taxon Name	ROSWELL
Texture Class	NM644 FS	Soil Phase	ROSWELL-JALMAR
Texture Modifier	NM644 FINE SANDS,HILLY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock observed.		

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes			X		
Comments:	Slight active pedestaling in flow paths on the grass plants especially. No					

	terracettes however.					
S H	Bare Ground			X		
Comments:	50% is the current estimate.					
S H	Gullies				X	
Comments:	Gullies are mainly on the roads.					
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:	Infrequent and few.					
H	Litter Movement				X	
Comments:	Litter against obstructions and in depressions.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Some reduction in stability on the interspace samples.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:	Plant changes have a minor effect.					
B	Functional/Structural Groups			X		
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Current estimate is 40%.					
B	Annual Production				X	
Comments:	600 lbs is the current estimate.					
B	Invasive Plants			X		
Comments:	Mesquite is scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological				X	

	Crusts					
Comments:	Physical crusting immediately under wind blown sand deposits.					
B	Wildlife Habitat			X		
Comments:	An undulating shinnery oak grassland habitat type with scattered yucca and mesquite, occasional unstabilized low sandy blowouts. Tall grasses appear to be in decline in this pasture.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species.					
B	Special Status Species Habitat			X		
Comments:	Within the LPC core area. The shinnery oak/tall grass vegetation community supports species unique to the Mescalero Sands ecosystem. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. The site is not within delineated SDL range although SDL may occur in unstabilized dune habitat (microhabitats). LPC are known to occur in the area. A lek site has been documented over the years and is inactive, the area does not support a high density of leks. There is a decline and production of tall grasses important for nesting habitat.					
B	Special Status Species Populations			X		
Comments:	LPC are known to occur in the area. A lek site has been documented over the years and is inactive, the area does not support a high density of leks. No specific SDL populations have been documented to date.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	6	2
H	Hydrologic	0	0	2	7	2
B	Biotic	0	0	6	4	3

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need*

More Info, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	2	9
Biotic		0	6	7

Site Notes: No livestock were observed in this pasture. Pronghorn are inhabiting this site. The sand bluestem component is reduced somewhat in favor of little bluestem, dropseed, threeawn and grama. Flow paths are extended resulting in some pedestal formation. The two-track leading to this site is almost impassable in places due to dunal formations on road.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-CHUMLEY #5-D080			
Legal Land Desc	NESE 16 0090S 0300E Meridian 23	Acreage	33
Ecosite	070BY062NM SHALLOW SAND CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/BAGGAO	Observation Date	01/11/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	FaA	Soil Taxon Name	FASKIN
Texture Class	NM644 LFS	Soil Phase	FASKIN
Texture Modifier	NM644 FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	30%-40% is the current estimate.					
S H	Gullies					X

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Physical crusting is holding soil in place and reducing some of the erosion potential					
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some loss of horizon from run off.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Grama, panicum, and threeawns can be observed. Reduction in gramas allowing for more threeawns and burrograss.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	ESD is 30%.					
B	Annual Production			X		
Comments:	Approximately 50% of ESD is estimated.					
B	Invasive Plants		X			
Comments:	Mesquite is common.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts are evident with some continuity breaks.					

B	Wildlife Habitat			X		
Comments:	Primarily State and private lands. A flat mesquite grassland habitat type. Mesquite invasion has created a shrub-type grassland on these shallow sandy soils. A decline in wildlife habitat is expected in the long run due to mesquite invasion, increase in three-awns and snakeweed competing with the black grama grasses, and possible soil and vegetation loss.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species. A general shift in the wildlife community based on habitat changes. Wildlife species tolerant to shrubs in the grassland community more common than those grassland species less tolerant to shrubs.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	8	3
B	Biotic	0	1	4	3	5

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final

agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	4	8

Site Notes: There is some reduction in the grama grass component on this site. Mesquite is common throughout. This upland area has the potential for improvement but also has the ability for erosional processes as a problem.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-E. PRESLER #4-D079			
Legal Land Desc	NWNW 15 0090S 0300E Meridian 23	Acreage	2442
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/BAGGAO	Observation Date	01/11/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	RPD	Soil Taxon Name	ROSWELL
Texture Class	NM644 FS	Soil Phase	ROSWELL-JALMAR
Texture Modifier	NM644 FINE SANDS,HILLY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock observed.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills				X	
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground			X		

Comments:	Present estimation is 50%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Species: Bogr, Aristida, Dropseed, Bluestem. Missing the sand bluestem.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:	Shinnery oak leaves are predominant litter. Long-term average is 41%, but amount now falls in the bottom end of range.					
B	Annual Production			X		
Comments:	40-60% of the long-term average, at 500 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Yucca and mesquite scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	

Comments:	Physical crusts evident with some breaks in continuity.					
B	Wildlife Habitat			X		
Comments:	A flat shinnery oak/tall grass habitat type in deep sand. Habitat recovering from severe drought. On good precipitation years, a good mix of shinnery oak and sand bluestem can be expected. General trend is downward due to the decrease in density of sand bluestem.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species.					
B	Special Status Species Habitat			X		
Comments:	The shinnery oak/tall grass vegetation community supports species unique to the Mescalero Sands ecosystem. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. Habitat disturbances from older oil and gas developments are slowly rehabilitating. Roads to the pads have fragmented habitat and allow more access to and through the area. Nesting habitat appears to be a factor that can be improved, specifically tall grass species such as sand bluestem.					
B	Special Status Species Populations			X		
Comments:	LPC are known to occur in the area. Several lek sites have been documented over the years. The active leks in the pasture exhibit stable counts. No specific SDL populations have been documented to date. Populations may occur in unstabilized dune habitat (microhabitats).					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	6	3
H	Hydrologic	0	0	2	7	2
B	Biotic	0	0	8	2	3

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need*

More Info, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	2	9
Biotic	A majority of indicators fall within moderate range.	0	8	5

Site Notes: This site does not have the sand bluestem component in any significant amount. The little bluestem however is still evident but in lesser amounts. Dropseeds and threeawns are the grass species apparent. Mesquite and yucca are scattered. Burrowing rodents are active. There is also sand sage scattered. No livestock were present at the time of assessment.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-MESCALERO-D094			
Legal Land Desc	SWSE 5 0090S 0310E Meridian 23	Acreage	1654
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	03/14/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	RPD	Soil Taxon Name	ROSWELL
Texture Class	NM644 FS	Soil Phase	ROSWELL-JALMAR
Texture Modifier	NM644 FINE SANDS,HILLY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	Pronghorn are the only ungulates observed at the time of assessment. No livestock are present. The only other disturbance is the road forming into gully features in some places.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes			X		

Comments:	Pedestals on the grass plants and yucca.					
S H	Bare Ground			X		
Comments:	Now estimated at 40-50%.					
S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:	Infrequent.					
H	Litter Movement			X		
Comments:	Litter against obstructions.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:	Some instability on the interspace samples.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Some minor affects on infiltration.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Little bluestem and gramas are evident but in lesser amounts. Sand sage and shinnery oak are also observed. Sand bluestem can still be found in some areas.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	30% is the present estimate.					
B	Annual Production			X		
Comments:	40-60% of potential is current estimate.					
B	Invasive Plants				X	
Comments:	Mesquite is less than scattered.					
B	Reproductive Capability of Perennial Plants					X

Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusting is evident.					
B	Wildlife Habitat			X		
Comments:	A flat shinnery oak/tall grass habitat type in deep sand. Habitat recovering from severe drought. On good precipitation years, a good mix of shinnery oak and sand bluestem can be expected. General trend is slightly downward.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species. Lesser prairie chickens were observed during assessment.					
B	Special Status Species Habitat			X		
Comments:	The shinnery oak/tall grass vegetation community supports species unique to the Mescalero Sands ecosystem. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. Habitat disturbances from older oil and gas developments are slowly rehabilitating. Roads to the pads have fragmented habitat and allow more access to and through the area. Nesting habitat appears to be a factor that can be improved, specifically tall grass species such as sand bluestem.					
B	Special Status Species Populations			X		
Comments:	LPC are known to occur in the area. Several lek sites have been documented over the years. The active leks in the pasture exhibit stable counts. No specific SDL populations have been documented to date. Populations may occur in unstabilized dune habitat (microhabitats).					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	6	2
H	Hydrologic	0	0	3	6	2
B	Biotic	0	0	5	5	3

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	3	8
Biotic		0	5	8

Site Notes: No livestock were observed as the allotee has removed most livestock from the ranch. The site is located on the most eastern terrace of the allotment. More sand bluestem and other grass species was observed. Pronghorn herds traverse the undulating hills and prairie chickens were observed just adjacent to trend plot. Shinnery oak and sand sage make up a majority of shrub component with mesquite in much lesser amounts. The road leading to study area is in need of maintenance as some stretches are forming gullies along the trek.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-MIDDLE #1-D076			
Legal Land Desc	NENW 33 0080S 0300E Meridian 23	Acreage	3246
Ecosite	070BY055NM SANDY PLAINS CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	02/28/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	FaA	Soil Taxon Name	FASKIN
Texture Class	NM644 LFS	Soil Phase	FASKIN
Texture Modifier	NM644 FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	Approaching upper end of scale.					
S H	Gullies			X		
Comments:	Bed erosion adjacent to roads.					
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants		X			
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical					

B	Wildlife Habitat		X			
Comments:	An undulating mixed shrub grassland with extensive oil and gas developments (habitat fragmentation) in the pasture. Shrub species include mesquite, yucca, broomsnakeweed and some shinnery oak.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species. A general shift in the wildlife community based on habitat changes. Wildlife species tolerant to shrubs in the grassland community more common than those grassland species less tolerant to shrubs.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	7	2
H	Hydrologic	0	0	2	7	2
B	Biotic	0	2	3	3	5

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	2	9
Biotic		2	3	8
Site Notes: Mesquite presents a potential problem; may require herbicidal treatment in the future.				

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-N. ANTELOPE #7-D082			
Legal Land Desc	NESW 27 0090S 0300E Meridian 23	Acreage	2316
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE	Observation Date	
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	RBA	Soil Taxon Name	RATLIFF
Texture Class	NM644 FSL	Soil Phase	RATLIFF-REDONA
Texture Modifier	NM644 FINE SANDY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock present.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	50% is the current estimate.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement			X		
Comments:	Movement against obstructions.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Boer,Aristida, small shinnery.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	30 to 40% is the current estimate.					
B	Annual Production			X		
Comments:	40-60% is the current estimate.					
B	Invasive Plants			X		
Comments:	Mesquite scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical.					

B	Wildlife Habitat			X		
Comments:	An undulating shinnery oak/tall grass habitat type in deep sand. Habitat recovering from severe drought. On good precipitation years, a good mix of shinnery oak and sand bluestem can be expected. General trend is downward due to the decrease in density of sand bluestem.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species.					
B	Special Status Species Habitat			X		
Comments:	The shinnery oak/tall grass vegetation community supports species unique to the Mescalero Sands ecosystem. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. Habitat disturbances from older oil and gas developments are slowly rehabilitating. Roads to the pads have fragmented habitat and allow more access to and through the area. Nesting habitat appears to be a factor that can be improved, specifically tall grass species such as sand bluestem.					
B	Special Status Species Populations			X		
Comments:	LPC are known to occur in the area. Several lek sites have been documented over the years. The active leks in the pasture exhibit stable counts. No specific SDL populations have been documented to date. Populations may occur in unstabilized dune habitat (microhabitats).					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	1	7	3
B	Biotic	0	0	6	5	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns.

Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	1	10
Biotic		0	6	7

Site Notes: Snakeweed present at edges. Decreased amount of bluestem. Yucca and threeawn present.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-PRESLER #3-D078			
Legal Land Desc	SESW 4 0090S 0300E Meridian 23	Acreage	729
Ecosite	070BY053NM CLAYEY CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	02/28/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	TvA	Soil Taxon Name	TUCUMCARI
Texture Class	NM644 CL	Soil Phase	TUCUMCARI
Texture Modifier	NM644 CLAY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground		X			

Comments:	Current estimate is 60%..					
S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas			X		
Comments:	Mesquite dunes building.					
H	Litter Movement			X		
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Currently estimated at 20%.					
B	Annual Production			X		
Comments:	40-60% of potential.					
B	Invasive Plants		X			
Comments:	Gusa, Prgl; cyclic and scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical.					

B	Wildlife Habitat			X		
Comments:	A flat mesquite grassland habitat type. Mesquite invasion has created a shrub-type grassland on these clayey soils. A decline in wildlife habitat is expected in the long run due to mesquite invasion and possible soil and vegetation loss (creation of dunes).					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species. A general shift in the wildlife community based on habitat changes. Wildlife species tolerant to shrubs in the grassland community more common than those grassland species less tolerant to shrubs.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	1	1	5	3
H	Hydrologic	0	1	1	6	3
B	Biotic	0	1	3	3	6

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		1	1	8
Hydrologic		1	1	9
Biotic		1	3	9
Site Notes:				

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-S. ANTELOPE #8-D083			
Legal Land Desc	NWNE 35 0090S 0300E Meridian 23	Acreage	2022
Ecosite	070BY063NM DEEP SAND CP-2	Photo Taken	Y
Watershed	13060007060 MESCALERO		
Observers	NAVARRO/BAGGAO	Observation Date	01/11/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	RPD	Soil Taxon Name	ROSWELL
Texture Class	NM644 FS	Soil Phase	ROSWELL-JALMAR
Texture Modifier	NM644 FINE SANDS,HILLY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock observed.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground			X		

Comments:	50 percent is the current estimate.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Sporobolus, gramas found here also.					
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:	40% is the current estimate.					
B	Annual Production			X		
Comments:	50-60% of potential.					
B	Invasive Plants			X		
Comments:	Yucca, mesquite are scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts			X		
Comments:	minor component.					

B	Wildlife Habitat				X	
Comments:	An undulating shinnery oak/tall grass habitat type in deep sand. Habitat recovering from severe drought. On good precipitation years, a good mix of shinnery oak and sand bluestem can be expected. General trend is stable to slightly upward due to the persistence of sand bluestem.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species.					
B	Special Status Species Habitat				X	
Comments:	The shinnery oak/tall grass vegetation community supports species unique to the Mescalero Sands ecosystem. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. Habitat disturbances from older oil and gas developments are slowly rehabilitating. Roads to the pads have fragmented habitat and allow more access to and through the area. Nesting habitat appears to be a factor that can be maintained and improved, specifically tall grass species such as sand bluestem.					
B	Special Status Species Populations				X	
Comments:	LPC are known to occur in the area. Several lek sites have been documented over the years. The active leks in the pasture exhibit stable counts. No specific SDL populations have been documented to date. Populations may occur in unstabilized dune habitat (microhabitats).					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	4	4
H	Hydrologic	0	0	1	7	3
B	Biotic	0	0	2	9	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns.

Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	1	10
Biotic		0	2	11

Site Notes: The site is very sandy and undulating. Most of the plants expected were observed. The removal of livestock has helped this pasture recover nicely. Bluestems are tall and continue to grow. An adequate litter component exists.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-WEANING #2-D077			
Legal Land Desc	SESE 31 0080S 0300E Meridian 23	Acreage	853
Ecosite	070BY053NM CLAYEY CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE/ARTHUN	Observation Date	02/28/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	BRB	Soil Taxon Name	BLAKENEY
Texture Class	NM644 FSL	Soil Phase	BLAKENEY-RATLIFF
Texture Modifier	NM644 FINE SANDY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock present.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	Estimated at 30%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	Soil sample exhibited very little melting under canopy as well as interspace.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Aristida species dominate grass at the present time.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Estimated currently at 20%.					
B	Annual Production				X	
Comments:	Estimated at 900lbs/acre.					
B	Invasive Plants				X	
Comments:	Mesquite less than scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts are evident with some breaks in continuity.					

B	Wildlife Habitat				X	
Comments:	Habitat type is a level shortgrass prairie with scattered cholla and broom snakeweed. Primary grass species has shifted to three-awn. Forb production is a concern.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population data at this time. The primary species of concern are pronghorn antelope and a variety of non-game wildlife species.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	0	5	6
B	Biotic	0	0	1	6	6

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10

Hydrologic		0	0	11
Biotic		0	1	12
Site Notes: Aristitda species was common, mesquite was less than scattered, possibly due to soil factors. Cattle were observed south of site.				

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-WEST #6-D081			
Legal Land Desc	NENE 19 0090S 0300E Meridian 23	Acreage	874
Ecosite	070BY054NM SANDY LOAM CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/MCGEE	Observation Date	01/11/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	CMB	Soil Taxon Name	CHISPA
Texture Class	NM644 FSL	Soil Phase	CHISPA-MALSTROM
Texture Modifier	NM644 FINE SANDY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:	No livestock presently. Some evidence of past trailing leading towards the tanks at bottom.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						

S H	Bare Ground		X			
Comments:	60% is current estimate.					
S H	Gullies					X
Comments:	Leads toward tanks at bottom.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Bluestems replaced by Aristida. Edge of shinnery oak/desert grasslands. Drop in gramas.					
B	Plant Mortality/Decadence				X	
Comments:	Significant.					
H B	Litter Amount				X	
Comments:	Shinnery oak litter.					
B	Annual Production			X		
Comments:	500 lbs/ac or kg/ha is current estimate.					
B	Invasive Plants			X		
Comments:	Yucca, Prgl.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological				X	

	Crusts					
Comments:	Physical crust observed.					
B	Wildlife Habitat			X		
Comments:	A flat mixed shrub grassland habitat type. Shrub species include mesquite, yucca, broomsnakeweed and some shinnery oak. Mesquite invasion has created a shrub-type grassland on this sandy loam rangesite. Because of the diverse assemblage of shrubs and grasses in this transition zone, wildlife habitat is also diverse but is expected in the long run to decline due to mesquite invasion, increase in three-awns and snakeweed, competing with shinery oak, sand sage, tall grasses and short grasses.					
B	Wildlife Populations			X		
Comments:	No specific wildlife population data at this time. The primary species of concern are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species. A general shift in the wildlife community based on habitat changes. Wildlife species tolerant to shrubs in the grassland community more common than those grassland species less tolerant to shrubs.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	1	0	5	4
H	Hydrologic	0	1	0	6	4
B	Biotic	0	0	5	4	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the

determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		1	0	9
Hydrologic		1	0	10
Biotic		0	5	8

Site Notes:

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 65034-WHITE LAKES-D095			
Legal Land Desc	NENE 35 0080S 0300E Meridian 23	Acreage	320
Ecosite	070BY055NM SANDY PLAINS CP-2	Photo Taken	Y
Watershed	13060007050 WHITE LAKES		
Observers	NAVARRO/ARTHUN	Observation Date	03/03/2005
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	FMA	Soil Taxon Name	FASKIN
Texture Class	NM644 LFS	Soil Phase	FASKIN-MALSTROM
Texture Modifier	NM644 LOAMY FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.23	NOAA Growing Season Precipitation	9.97
NOAA Avg Annual Precipitation	12.63	NOAA Avg Growing Season Precipitation	10.48
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						

S H	Bare Ground			X		
Comments:	Current estimate is 50%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement			X		
Comments:	Litter has been deposited against obstructions and in depressions.					
S H B	Soil Surface Resistance to Erosion			X		
Comments:	Soil exhibits melting in interspace sample readily.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	There is an absence of little bluestem and sand bluestem.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Estimates are at 30%.					
B	Annual Production			X		
Comments:	Current estimate is approximately 600-700 lbs/ac or kg/ha. Long-term average is approximately 830 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Mesquite is scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological				X	

	Crusts					
Comments:	Physical crusting can be observed.					
B	Wildlife Habitat			X		
Comments:	An undulating shinnery oak grassland habitat type with scattered yucca and mesquite, occasional unstabilized low sandy blowouts. Tall grasses appear to be in decline in this pasture.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population data at this time. The primary species of concern, other than those identified below, are pronghorn antelope, desert mule deer, upland game species and a variety of non-game wildlife species.					
B	Special Status Species Habitat				X	
Comments:	Within the LPC core area. The shinnery oak/tall grass vegetation community supports species unique to the Mescalero Sands ecosystem. Lek sites are available within the pasture and include abandoned oil and gas pads and natural sites. The site is not within delineated SDL range although SDL may occur in unstabilized dune habitat (microhabitats).					
B	Special Status Species Populations				X	
Comments:	LPC are known to occur in the area. A lek site has been documented over the years and is inactive, the area does not support a high density of leks. No specific SDL populations have been documented to date.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	5	3
H	Hydrologic	0	0	3	5	3
B	Biotic	0	0	5	6	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the

ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	3	8
Biotic		0	5	8

Site Notes: This site rests east of the oil and gas development in the Cato Oil Fields. The roads and activities do not impact this site. No livestock are currently using this pasture although pronghorn herds are inhabiting the allotment. Shinnery oak and yucca are the two shrubs making up most of the production through the years although the grasses make up some of the biomass. Forbs are a major component on site, mostly perennial.

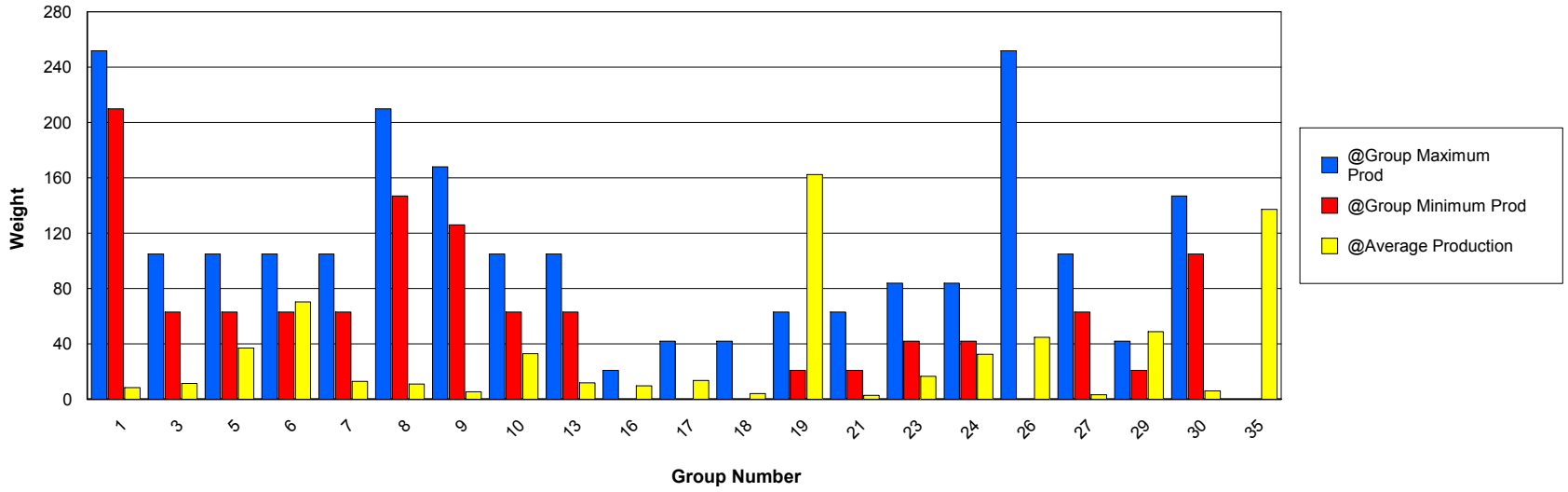
Functional / Structural Groups

Report Parameters

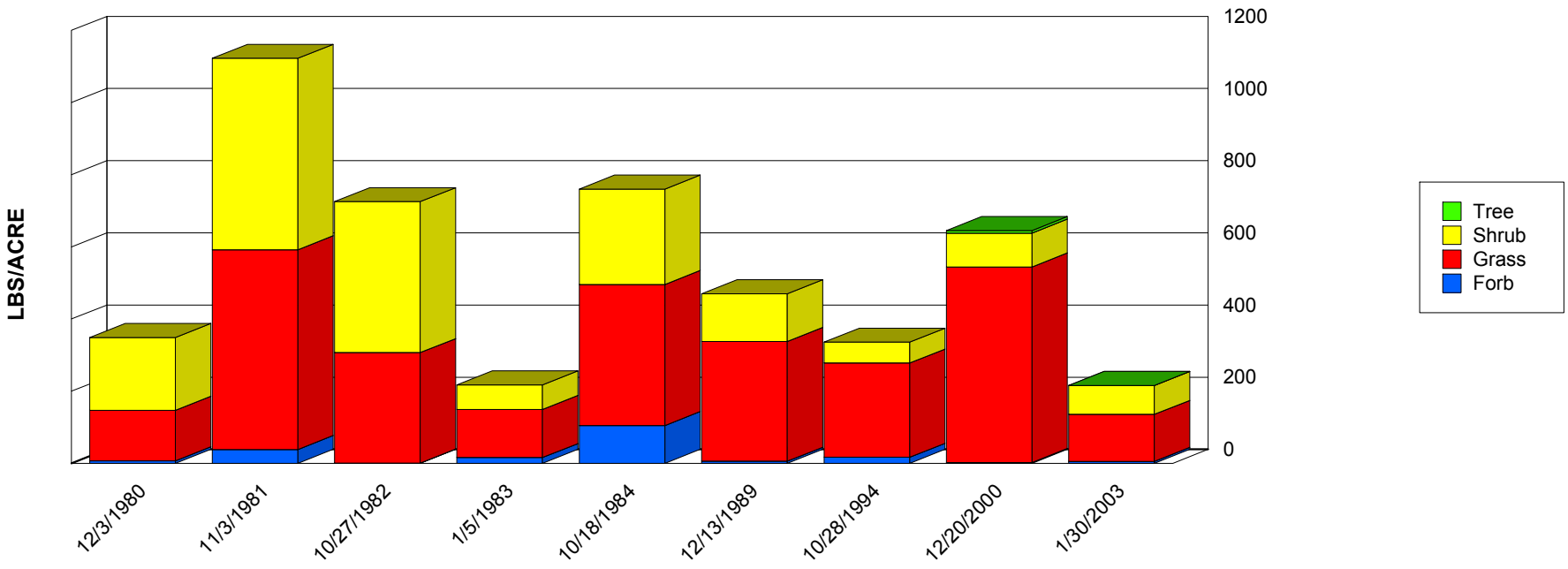
SITE NAME LIKE	65034-APACHE-D098
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY055NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	210	252	0.00	16.99	8.49	8.49
3	Grass	EROX	63	105	0.00	22.94	11.47	11.47
5	Grass	BOHI2	63	105	5.22	146.67	37.03	45.64
6	Grass	ARIST	63	105	4.43	193.20	70.35	56.76
7	Grass	LECO	63	105	1.00	26.56	12.95	8.67
8	Grass	SPCR	147	210	2.00	30.00	10.95	8.48
9	Grass	STNE2	126	168	0.00	16.00	5.33	7.54
10	Grass	BOER4	63	105	14.00	58.00	32.86	14.44
13	Grass	BOCU	63	105	2.80	29.77	11.78	9.51
16	Grass	CAREX	0	21	3.84	15.62	9.73	5.89
17	Grass	MUAR2	0	42	6.00	24.00	13.52	7.64
18	Grass	MUPO2	0	42	1.00	7.90	4.10	2.47
19	Grass	AGSM	21	63	0.00	3.97	1.98	1.98
19	Grass	BOGR2	21	63	23.76	329.84	111.52	102.10
19	Grass	CHCU2	21	63	0.00	36.50	13.06	12.52
19	Grass	MUAR	21	63	0.00	2.00	0.67	0.94
19	Grass	MUTO2	21	63	0.00	21.33	11.11	8.73
19	Grass	PAHA	21	63	0.00	9.60	4.80	4.80
19	Grass	PAOB	21	63	3.00	13.00	7.65	4.07
19	Grass	SCPA	21	63	0.00	7.28	3.64	3.64
19	Grass	SPFL2	21	63	1.00	15.00	8.00	7.00
21	Forb	ERIOG	21	63	0.51	5.00	2.75	2.25
23	Forb	AAFF	42	84	0.45	50.00	16.60	19.04
24	Forb	CROTO	42	84	2.00	50.00	26.00	24.00
24	Forb	CRPO5	42	84	0.00	2.33	1.17	1.17
24	Forb	LEPID	42	84	0.00	16.08	5.36	7.58

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
26	Shrub	QUHA3	0	252	8.21	179.40	44.71	52.74
27	Tree	YUEL	63	105	0.00	6.67	3.33	3.33
29	Shrub	GUSA2	21	42	4.00	131.00	48.83	39.85
30	Shrub	ARFI2	105	147	1.32	12.00	6.07	4.81
35	Shrub	PRGL2	0	0	19.00	365.70	137.18	120.41



Production Lbs/Acre Trends

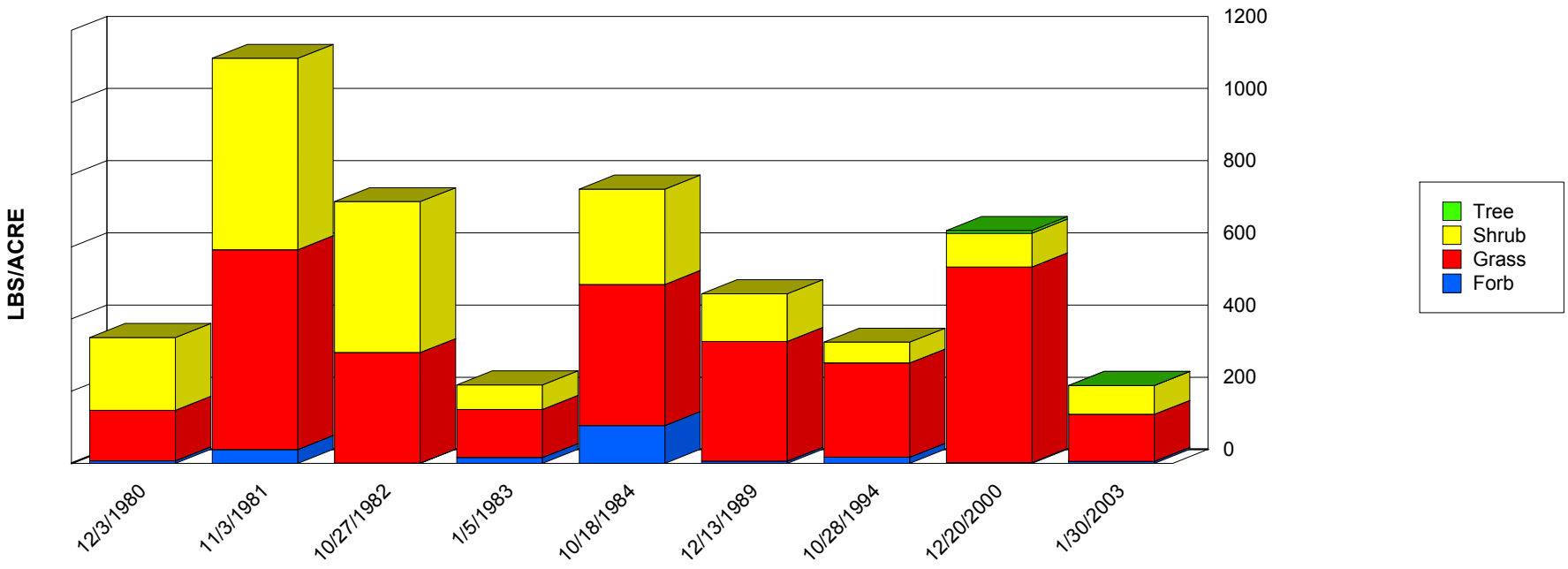


	12/3/1980	11/3/1981	10/27/1982	1/5/1983	10/18/1984	12/13/1989	10/28/1994	12/20/2000	1/30/2003
Forb	**7.00**	**38.54**	**0.90**	**16.08**	**105.00**	**6.00**	**17.00**	**2.33**	**5.49**
Grass	**140.00**	**553.72**	**306.10**	**133.42**	**391.00**	**332.00**	**261.00**	**542.19**	**130.29**
Shrub	**202.00**	**530.42**	**418.44**	**67.78**	**264.00**	**132.00**	**58.00**	**93.77**	**80.05**
Tree	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6.67**	**0.00**
Total	**349.00**	**1,122.68**	**725.44**	**217.28**	**760.00**	**470.00**	**336.00**	**644.96**	**215.83**

Report Parameters

SITE NAME LIKE	65034-APACHE-D098
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Production Lbs/Acre Trends



	12/3/1980	11/3/1981	10/27/1982	1/5/1983	10/18/1984	12/13/1989	10/28/1994	12/20/2000	1/30/2003
Forb	**7.00**	**38.54**	**0.90**	**16.08**	**105.00**	**6.00**	**17.00**	**2.33**	**5.49**
Grass	**140.00**	**553.72**	**306.10**	**133.42**	**391.00**	**332.00**	**261.00**	**542.19**	**130.29**
Shrub	**202.00**	**530.42**	**418.44**	**67.78**	**264.00**	**132.00**	**58.00**	**93.77**	**80.05**
Tree	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6.67**	**0.00**
Total	**349.00**	**1,122.68**	**725.44**	**217.28**	**760.00**	**470.00**	**336.00**	**644.96**	**215.83**

Report Parameters

SITE NAME LIKE	65034-APACHE-D098
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

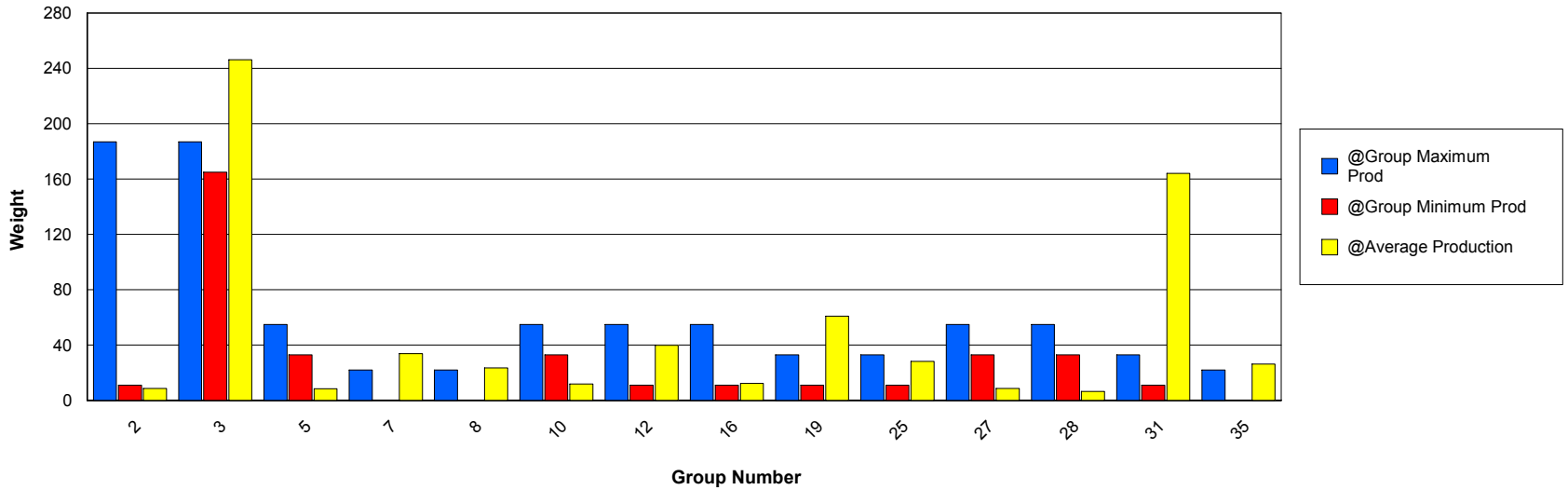
Functional / Structural Groups

Report Parameters

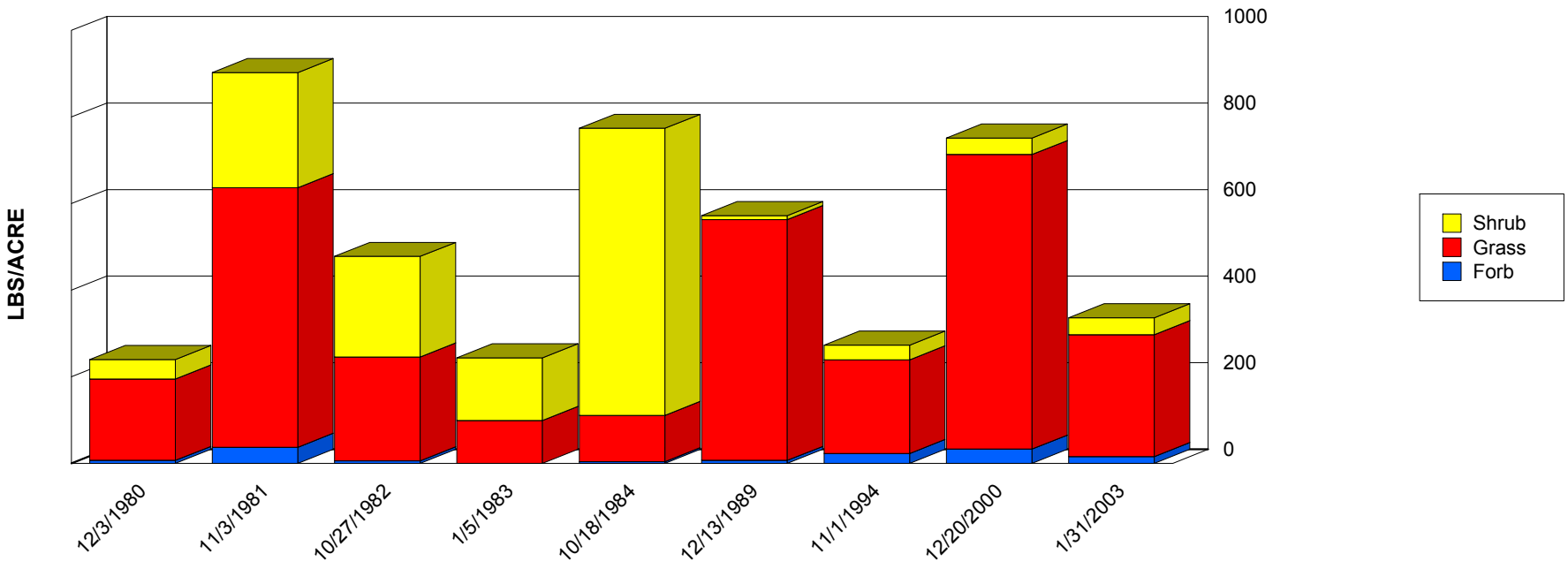
SITE NAME LIKE	65034-BIG HORN GRAMA-D096
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY054NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
2	Grass	BOCU	11	187	1.74	19.63	8.55	6.52
3	Grass	BOER4	165	187	28.00	176.96	89.65	47.69
3	Grass	BOGR2	165	187	34.80	385.00	143.93	108.03
3	Grass	BOHI2	165	187	1.00	20.53	12.74	7.28
5	Grass	SPCR	33	55	2.92	29.00	8.49	8.24
6	Grass	EROX	33	55	0.00	1.24	0.62	0.62
7	Grass	LECO	0	22	0.00	92.40	33.75	41.63
8	Grass	MUAR2	0	22	12.00	51.00	23.51	15.94
10	Grass	ARIST	33	55	1.00	47.32	11.88	15.99
12	Grass	MUPO2	11	55	7.00	72.60	39.80	32.80
16	Grass	PAOB	11	55	4.00	31.69	12.21	8.70
19	Grass	ANHA	11	33	0.00	6.67	3.34	3.34
19	Grass	MUAR	11	33	0.00	10.00	3.33	4.71
19	Grass	MUTO2	11	33	0.00	153.60	54.18	58.92
25	Forb	CROTO	11	33	0.86	15.00	5.16	5.41
25	Forb	CRPO5	11	33	14.72	31.27	22.99	8.27
27	Forb	ASTRA	33	55	0.00	14.76	5.25	6.74
27	Forb	LESQU	33	55	0.00	11.70	3.51	4.76
28	Forb	AAFF	33	55	0.91	9.84	6.44	3.35
31	Shrub	GUSA2	11	33	23.04	663.00	164.24	201.68
35	Shrub	PRGL2	0	22	5.00	115.36	26.28	39.97

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV



Production Lbs/Acre Trends

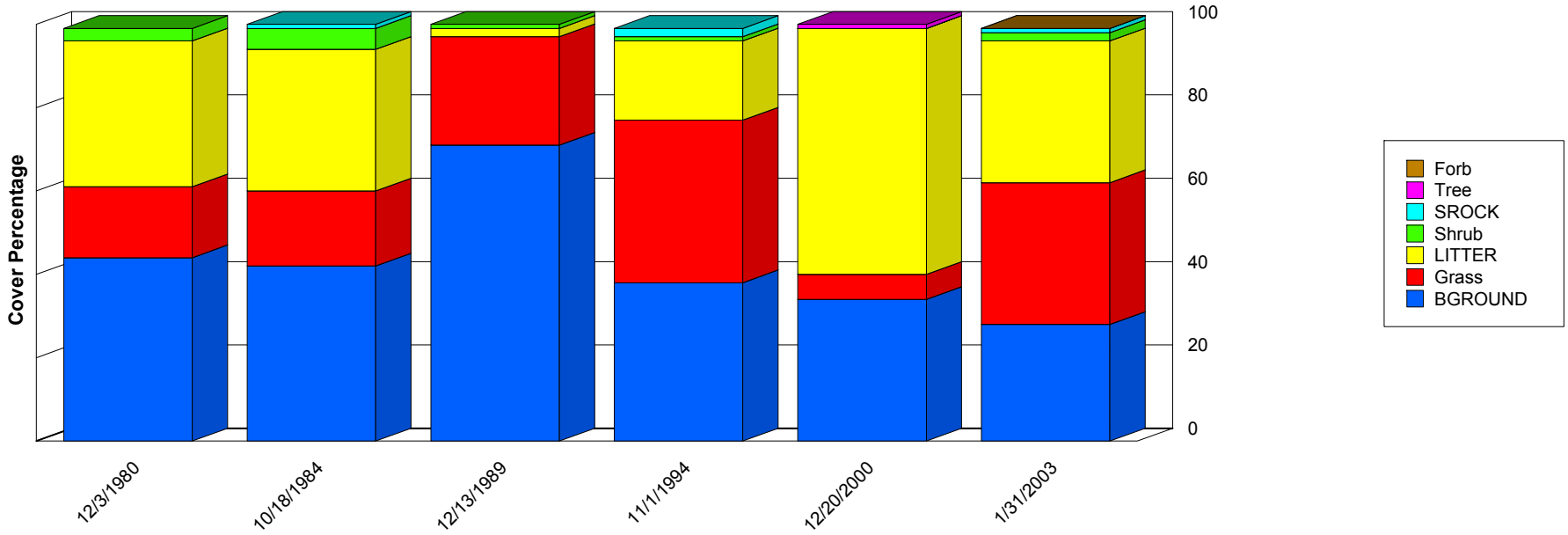


	12/3/1980	11/3/1981	10/27/1982	1/5/1983	10/18/1984	12/13/1989	11/1/1994	12/20/2000	1/31/2003
Forb	**7.00**	**37.16**	**6.14**	**0.00**	**4.00**	**7.00**	**23.00**	**33.06**	**15.88**
Grass	**188.00**	**599.52**	**239.54**	**99.26**	**107.00**	**556.00**	**216.00**	**680.24**	**281.21**
Shrub	**45.00**	**266.16**	**232.32**	**144.72**	**663.00**	**9.00**	**34.00**	**38.04**	**39.33**
Total	**240.00**	**902.84**	**478.00**	**243.98**	**774.00**	**572.00**	**273.00**	**751.34**	**336.42**

Report Parameters

SITE NAME LIKE	65034-BIG HORN GRAMA-D096
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/18/1984	12/13/1989	11/1/1994	12/20/2000	1/31/2003
BGROUND	44.00	42.00	71.00	38.00	34.00	28.00
Forb	0.00	0.00	0.00	0.00	0.00	0.00
Grass	17.00	18.00	26.00	39.00	6.00	34.00
LITTER	35.00	34.00	2.00	19.00	59.00	34.00
Shrub	3.00	5.00	1.00	1.00	0.00	2.00
SROCK	0.00	1.00	0.00	2.00	0.00	1.00
Tree	0.00	0.00	0.00	0.00	1.00	0.00

	12/3/1980	10/18/1984	12/13/1989	11/1/1994	12/20/2000	1/31/2003
Total	99.00	100.00	100.00	99.00	100.00	99.00

Report Parameters

SITE NAME LIKE	65034-BIG HORN GRAMA-D096
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

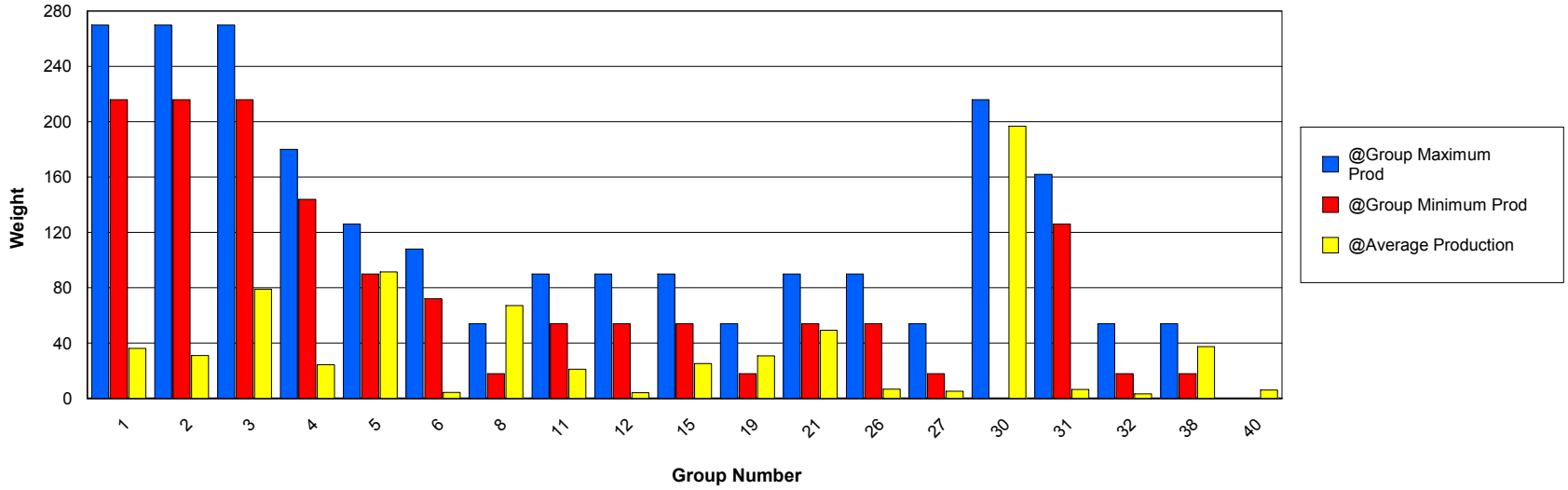
Functional / Structural Groups

Report Parameters

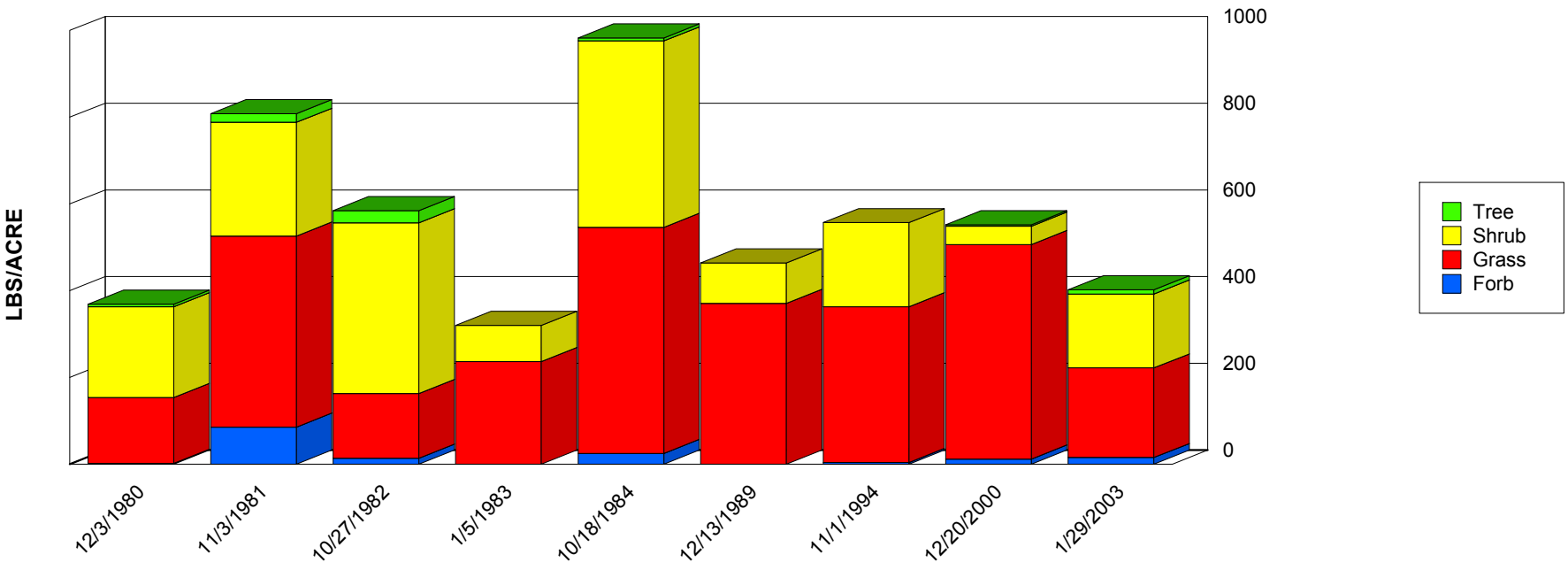
SITE NAME LIKE	65034-BIG HORN SAND-D097
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY063NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	216	270	5.00	91.00	36.22	26.90
2	Grass	ANSC2	216	270	0.00	78.00	31.01	29.82
3	Grass	SPCO4	216	270	3.00	12.00	7.50	4.50
3	Grass	SPCR	216	270	8.00	62.00	24.89	19.52
3	Grass	SPFL2	216	270	12.00	81.00	46.50	34.50
4	Grass	BOHI2	144	180	4.00	55.73	24.38	15.04
5	Grass	ARIST	90	126	45.36	141.96	91.41	35.72
6	Grass	PAST6	72	108	0.00	7.04	4.38	2.42
8	Grass	LECO	18	54	31.00	163.24	67.07	37.30
9	Grass	MUSQ	0	36	0.00	1.19	0.73	0.52
11	Grass	BOCU	54	90	3.24	48.13	21.17	16.38
12	Grass	BOER4	54	90	1.52	10.20	4.21	2.69
15	Grass	EROX	54	90	1.33	60.14	25.29	21.68
18	Grass	CAREX	0	18	1.33	2.00	1.67	0.33
19	Grass	AGSM	18	54	0.00	35.70	17.85	17.85
19	Grass	ANGE	18	54	0.00	17.59	8.80	8.80
19	Grass	BOGR2	18	54	0.00	9.00	4.09	3.24
21	Forb	ERAN4	54	90	9.12	74.82	41.97	32.85
21	Forb	ERIOG	54	90	1.00	13.68	7.34	6.34
26	Forb	AAFF	54	90	0.45	23.00	6.66	7.85
27	Forb	CRJA2	18	54	0.00	5.13	2.04	2.22
27	Forb	HYSC	18	54	0.00	1.92	0.96	0.96
27	Forb	MELE2	18	54	0.00	4.80	2.20	1.98
30	Shrub	QUHA3	0	216	32.27	407.00	196.92	126.52
31	Shrub	ARFI2	126	162	2.00	9.00	6.59	2.73
32	Shrub	GUSA2	18	54	0.00	10.00	3.33	4.71

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
38	Shrub	YUCCA	18	54	10.00	40.00	25.00	15.00
38	Tree	YUEL	18	54	3.33	28.08	12.37	8.74
40	Shrub	PRGL2	0	0	3.00	12.00	6.00	4.24



Production Lbs/Acre Trends

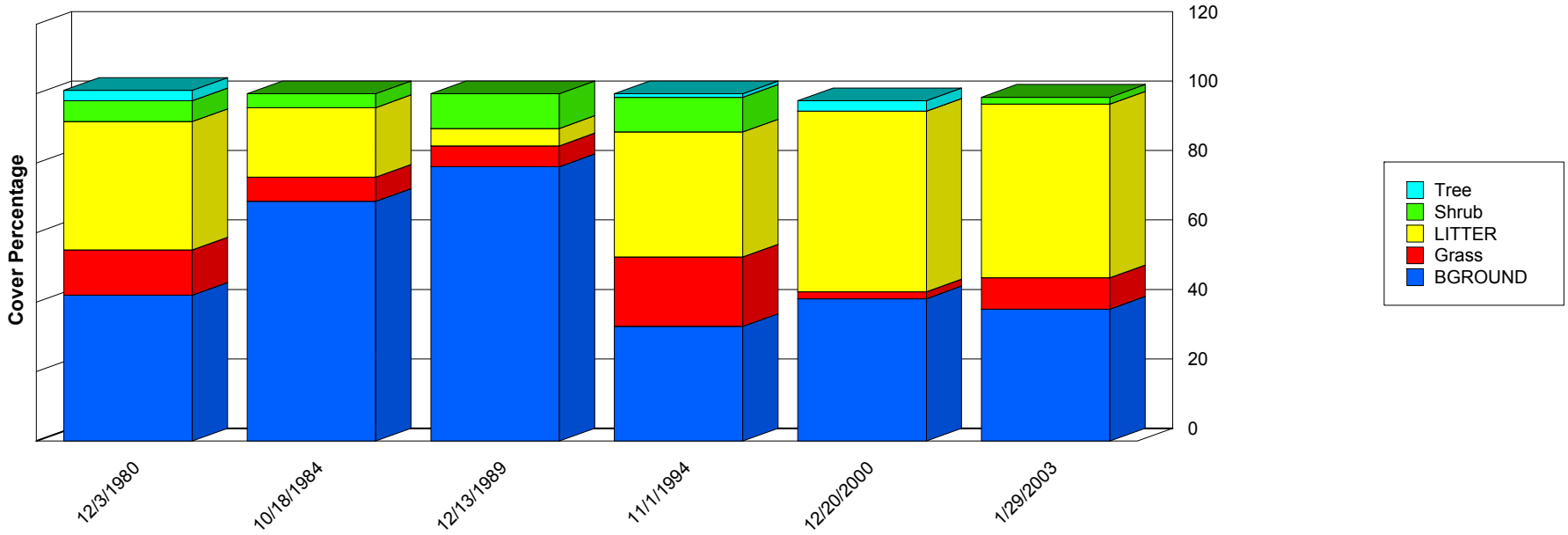


	12/3/1980	11/3/1981	10/27/1982	1/5/1983	10/18/1984	12/13/1989	11/1/1994	12/20/2000	1/29/2003
Forb	**2.00**	**85.64**	**13.62**	**0.00**	**25.00**	**0.00**	**4.00**	**11.85**	**15.47**
Grass	**152.00**	**440.54**	**149.46**	**236.54**	**521.00**	**371.00**	**359.00**	**494.34**	**206.60**
Shrub	**209.00**	**262.08**	**393.36**	**83.52**	**430.00**	**93.00**	**194.00**	**42.47**	**170.20**
Tree	**6.00**	**19.80**	**28.08**	**0.00**	**7.00**	**0.00**	**0.00**	**3.33**	**10.00**
Total	**369.00**	**808.06**	**584.52**	**320.06**	**983.00**	**464.00**	**557.00**	**551.99**	**402.27**

Report Parameters

SITE NAME LIKE	65034-BIG HORN SAND-D097
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/18/1984	12/13/1989	11/1/1994	12/20/2000	1/29/2003
BGROUND	42.00	69.00	79.00	33.00	41.00	38.00
Grass	13.00	7.00	6.00	20.00	2.00	9.00
LITTER	37.00	20.00	5.00	36.00	52.00	50.00
Shrub	6.00	4.00	10.00	10.00	0.00	2.00
Tree	3.00	0.00	0.00	1.00	3.00	0.00
Total	101.00	100.00	100.00	100.00	98.00	99.00

Report Parameters

SITE NAME LIKE	65034-BIG HORN SAND-D097
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

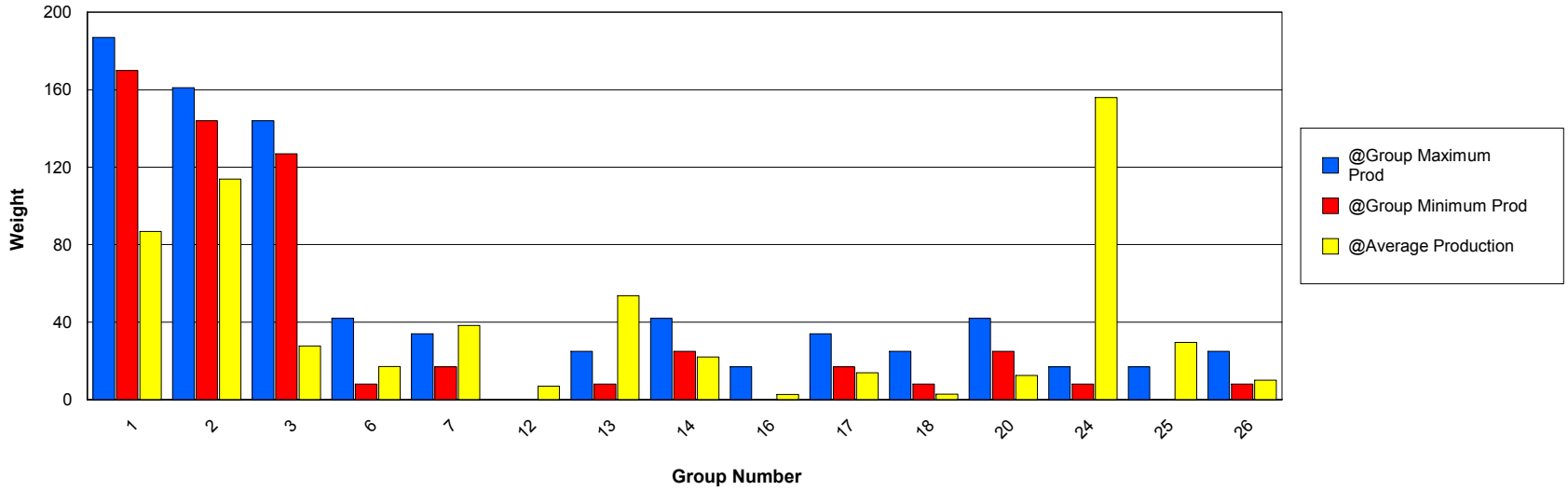
Functional / Structural Groups

Report Parameters

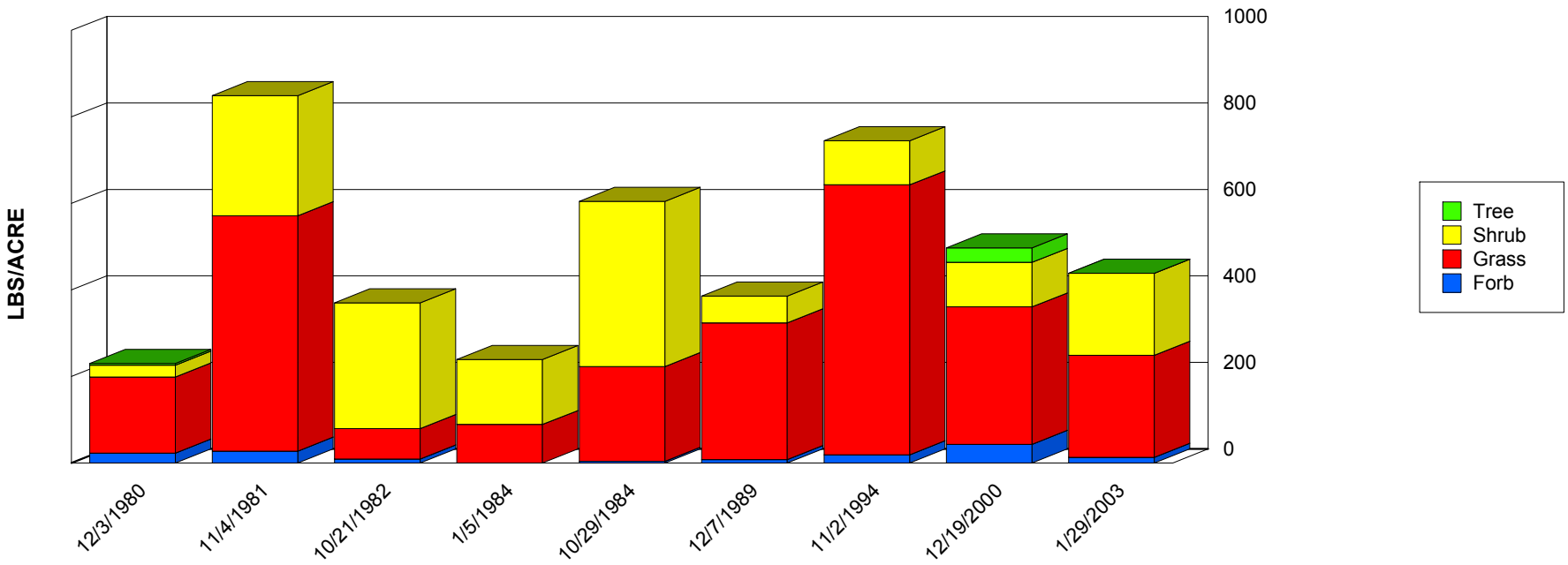
SITE NAME LIKE	65034-CHUMLEY #5-D080
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY062NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOGR2	170	187	21.08	264.00	86.81	70.24
2	Grass	BOER4	144	161	23.12	237.00	113.83	68.45
3	Grass	BOCU	127	144	7.60	75.00	27.77	27.45
6	Grass	SPCR	8	42	1.24	42.00	17.05	15.05
7	Grass	ARIST	17	34	1.36	79.47	25.19	24.04
7	Grass	MUAR2	17	34	1.52	28.00	13.07	8.55
12	Grass	ERPU8	0	0	0.00	14.00	7.00	7.00
13	Grass	AGSM	8	25	0.00	9.07	4.53	4.53
13	Grass	MUAR	8	25	2.32	5.22	3.77	1.45
13	Grass	MUHLE	8	25	0.00	2.67	1.33	1.33
13	Grass	MUTO2	8	25	0.00	70.40	23.47	33.19
13	Grass	PAHA	8	25	0.00	28.16	8.54	11.59
13	Grass	PAOB	8	25	2.00	48.00	12.07	14.87
14	Forb	CROTO	25	42	1.92	18.00	6.39	5.96
14	Forb	CRPO5	25	42	0.00	31.27	15.63	15.63
16	Forb	ASMO	0	17	0.00	8.20	2.73	3.87
17	Forb	ALUN	17	34	0.00	8.17	4.08	4.08
17	Forb	HYFL	17	34	0.00	2.10	0.70	0.99
17	Forb	LEFE	17	34	0.00	16.92	5.64	7.98
17	Forb	LESQU	17	34	0.00	2.44	1.22	1.22
17	Forb	PEPA8	17	34	0.00	1.31	0.65	0.65
17	Forb	PPFF	17	34	0.25	3.00	1.63	1.37
18	Forb	AAFF	8	25	1.00	5.00	2.85	1.81
20	Tree	YUEL	25	42	0.00	33.33	12.44	14.86
24	Shrub	GUSA2	8	17	14.00	374.00	156.04	123.13
25	Shrub	PRGL2	0	17	6.60	72.36	29.50	21.88

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
26	Shrub	OPUNT	8	25	0.00	20.00	10.00	10.00



Production Lbs/Acre Trends

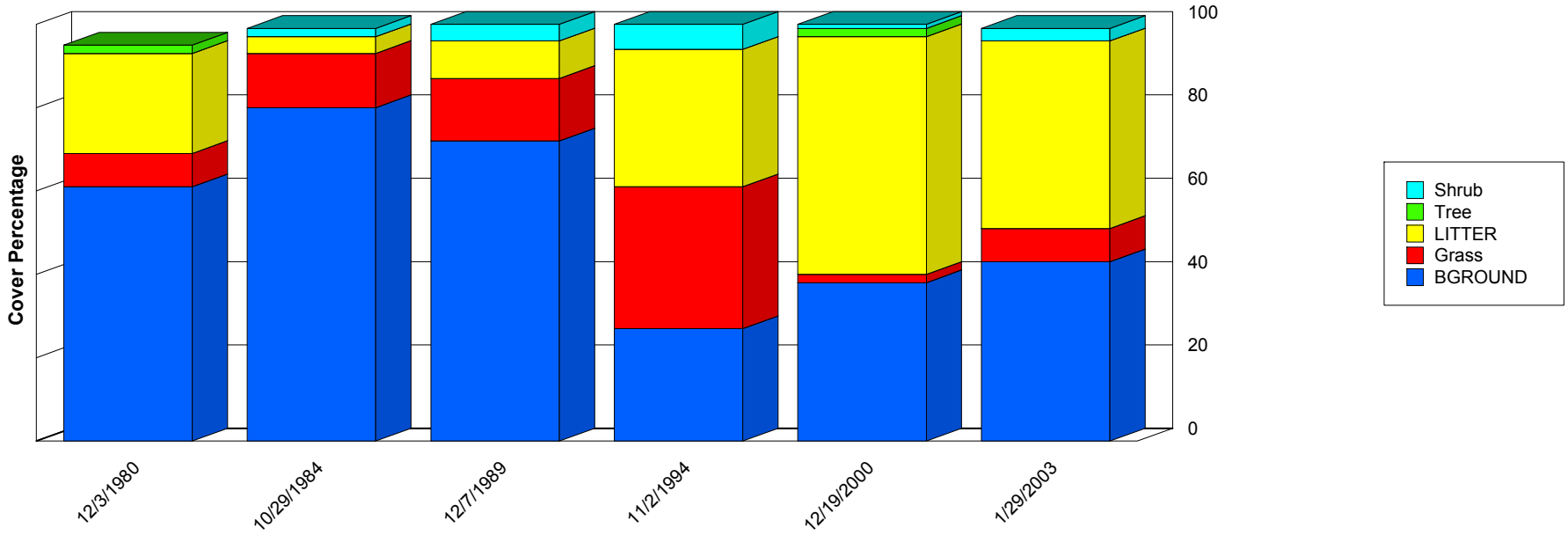


	12/3/1980	11/4/1981	10/21/1982	1/5/1984	10/29/1984	12/7/1989	11/2/1994	12/19/2000	1/29/2003
Forb	**23.00**	**27.22**	**9.22**	**0.00**	**4.00**	**8.00**	**19.00**	**43.18**	**12.95**
Grass	**176.00**	**544.52**	**70.36**	**89.00**	**219.00**	**316.00**	**624.00**	**317.48**	**236.06**
Shrub	**27.00**	**277.60**	**290.68**	**150.08**	**382.00**	**62.00**	**102.00**	**103.16**	**189.83**
Tree	**4.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**33.33**	**0.00**
Total	**230.00**	**849.34**	**370.26**	**239.08**	**605.00**	**386.00**	**745.00**	**497.15**	**438.84**

Report Parameters

SITE NAME LIKE	65034-CHUMLEY #5-D080
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/29/1984	12/7/1989	11/2/1994	12/19/2000	1/29/2003
BGROUND	61.00	80.00	72.00	27.00	38.00	43.00
Grass	8.00	13.00	15.00	34.00	2.00	8.00
LITTER	24.00	4.00	9.00	33.00	57.00	45.00
Shrub	0.00	2.00	4.00	6.00	1.00	3.00
Tree	2.00	0.00	0.00	0.00	2.00	0.00
Total	95.00	99.00	100.00	100.00	100.00	99.00

Report Parameters

SITE NAME LIKE	65034-CHUMLEY #5-D080
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

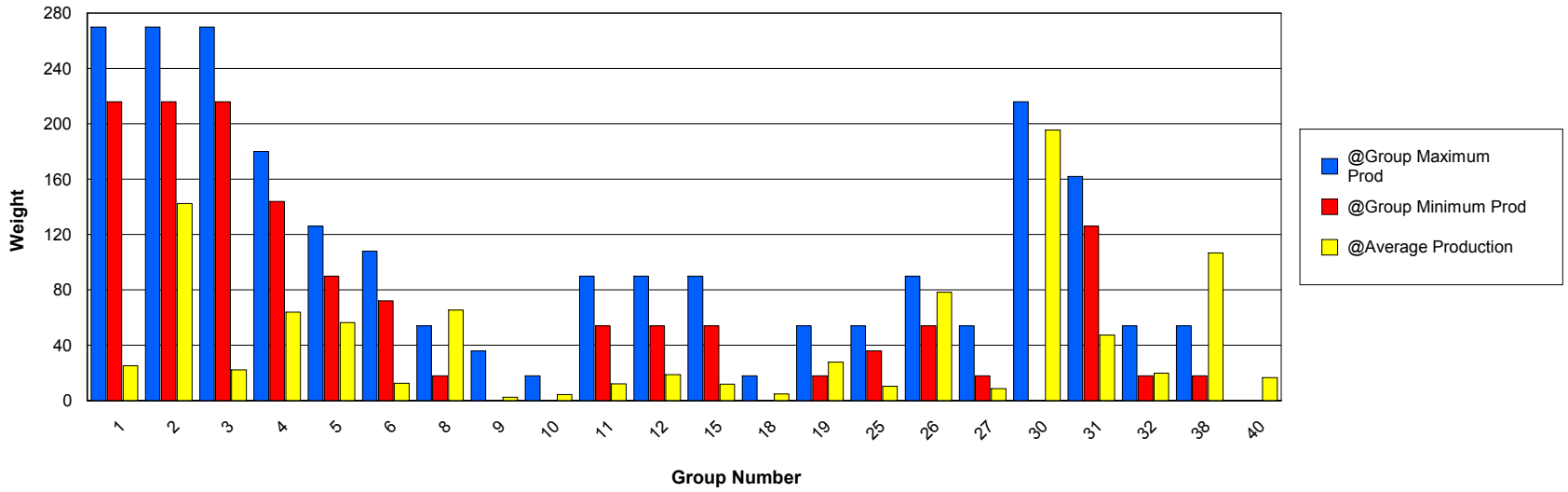
Functional / Structural Groups

Report Parameters

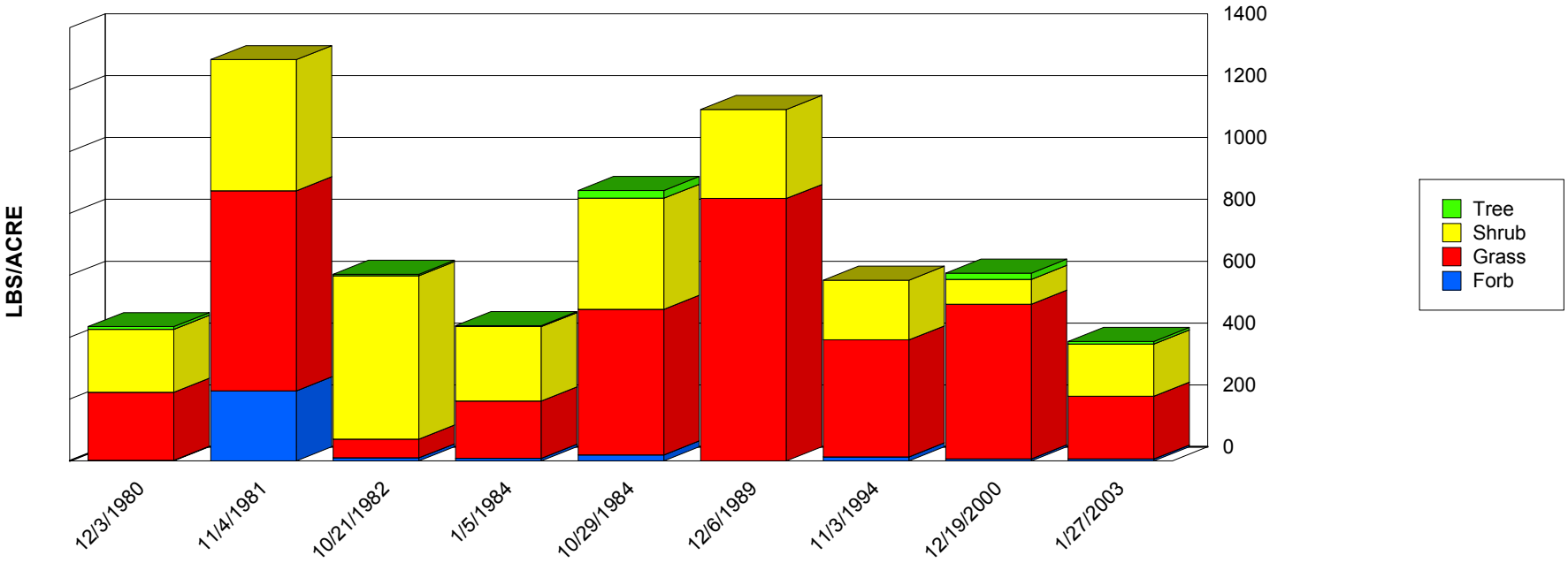
SITE NAME LIKE	65034-E. PRESLER #4-D079
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY063NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	216	270	0.00	70.98	25.16	25.45
2	Grass	ANSC2	216	270	0.00	601.00	142.41	187.77
3	Grass	SPCR	216	270	3.48	39.43	22.31	10.82
4	Grass	BOHI2	144	180	2.64	118.00	63.91	41.22
5	Grass	ARIST	90	126	8.23	202.80	56.42	57.81
6	Grass	PAST6	72	108	0.67	4.00	2.67	1.24
6	Grass	SEMA5	72	108	0.00	25.60	9.87	11.24
8	Grass	LECO	18	54	8.00	261.80	64.29	76.71
8	Grass	PAHA	18	54	0.00	2.40	1.20	1.20
9	Grass	CEPA7	0	36	2.00	3.00	2.50	0.50
10	Grass	BOBA3	0	18	0.00	13.20	4.40	6.22
11	Grass	BOCU	54	90	5.00	32.30	12.05	9.02
12	Grass	BOER4	54	90	4.74	39.10	18.86	10.84
15	Grass	EROX	54	90	1.33	28.00	11.84	10.00
16	Grass	ERSE2	0	18	0.00	5.36	1.79	2.53
18	Grass	CAPR5	0	18	0.00	4.00	2.00	2.00
18	Grass	CAREX	0	18	0.00	11.36	2.73	4.35
19	Grass	AGSM	18	54	0.00	13.03	6.52	6.52
19	Grass	ANGE	18	54	0.00	27.30	13.65	13.65
19	Grass	BOGR2	18	54	0.00	22.80	7.60	10.75
21	Forb	ERIOG	54	90	0.90	1.01	0.96	0.06
25	Forb	AMPS	36	54	8.04	15.00	10.45	3.22
26	Forb	AAFF	54	90	2.00	4.53	2.84	1.19
26	Forb	ERAN	54	90	0.00	226.20	75.40	106.63
27	Forb	CRJA2	18	54	0.00	6.53	2.84	2.73
27	Forb	PPFF	18	54	0.51	11.00	5.75	5.25

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
30	Shrub	QUHA3	0	216	44.00	463.68	195.66	116.52
31	Shrub	ARFI2	126	162	4.00	145.20	47.42	42.61
32	Shrub	GUSA2	18	54	1.00	37.00	19.82	15.07
38	Shrub	YUCCA	18	54	60.00	130.00	95.00	35.00
38	Tree	YUEL	18	54	3.60	25.00	11.72	7.97
40	Shrub	PRGL2	0	0	4.00	29.04	16.52	12.52



Production Lbs/Acre Trends

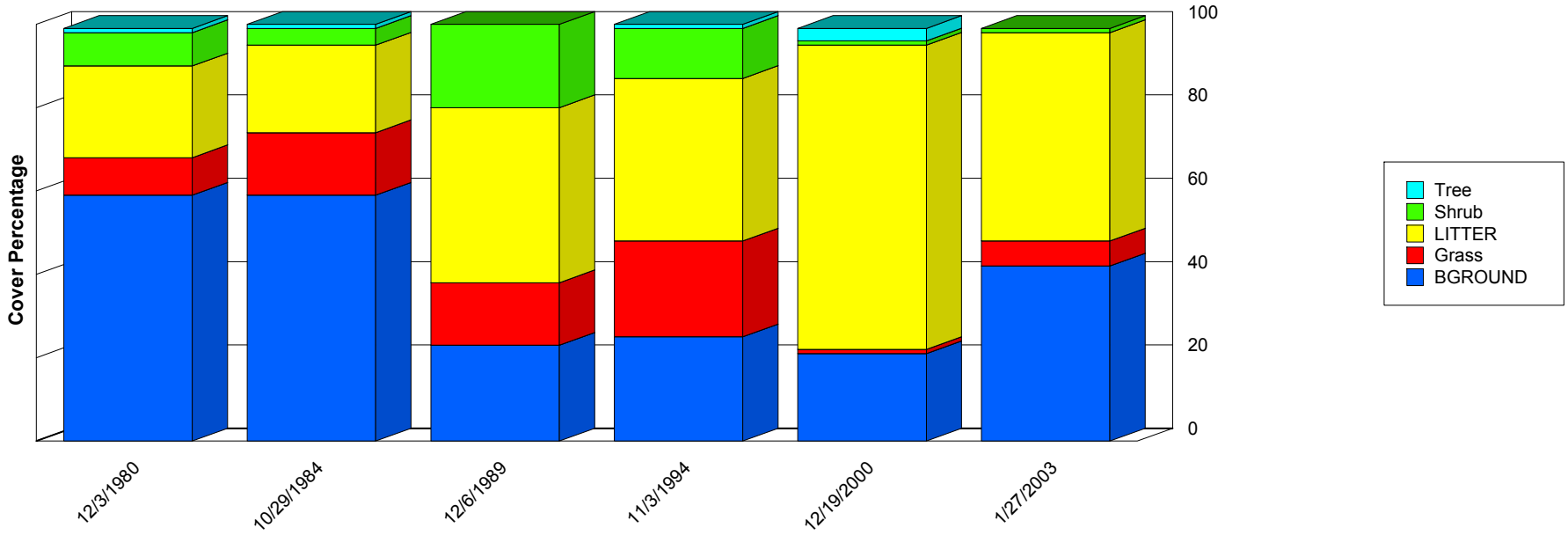


	12/3/1980	11/4/1981	10/21/1982	1/5/1984	10/29/1984	12/6/1989	11/3/1994	12/19/2000	1/27/2003
Forb	**2.00**	**226.20**	**9.66**	**8.04**	**19.00**	**0.00**	**13.00**	**6.53**	**6.05**
Grass	**220.00**	**647.16**	**60.92**	**185.34**	**471.00**	**848.00**	**378.00**	**499.97**	**202.72**
Shrub	**203.00**	**423.60**	**527.70**	**240.46**	**359.00**	**288.00**	**193.00**	**80.51**	**168.97**
Tree	**9.00**	**0.00**	**4.70**	**3.60**	**25.00**	**0.00**	**0.00**	**20.00**	**8.00**
Total	**434.00**	**1,296.96**	**602.98**	**437.44**	**874.00**	**1,136.00**	**584.00**	**607.02**	**385.75**

Report Parameters

SITE NAME LIKE	65034-E. PRESLER #4-D079
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/29/1984	12/6/1989	11/3/1994	12/19/2000	1/27/2003
BGROUND	59.00	59.00	23.00	25.00	21.00	42.00
Grass	9.00	15.00	15.00	23.00	1.00	6.00
LITTER	22.00	21.00	42.00	39.00	73.00	50.00
Shrub	8.00	4.00	20.00	12.00	1.00	1.00
Tree	1.00	1.00	0.00	1.00	3.00	0.00
Total	99.00	100.00	100.00	100.00	99.00	99.00

Report Parameters

SITE NAME LIKE	65034-E. PRESLER #4-D079
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

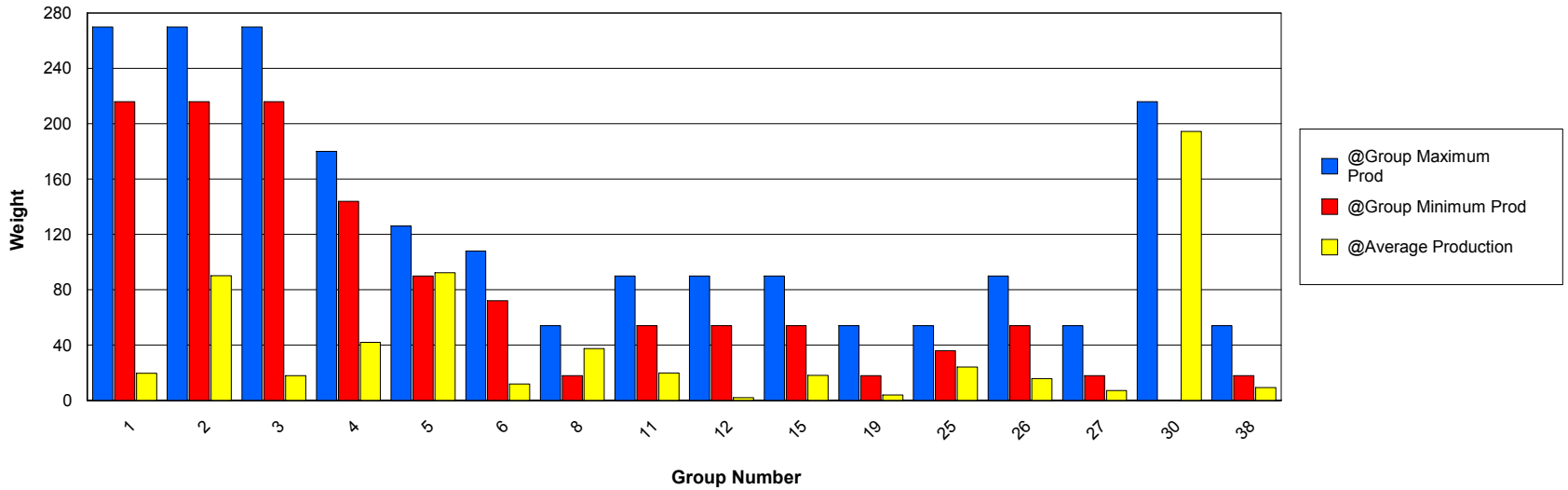
Functional / Structural Groups

Report Parameters

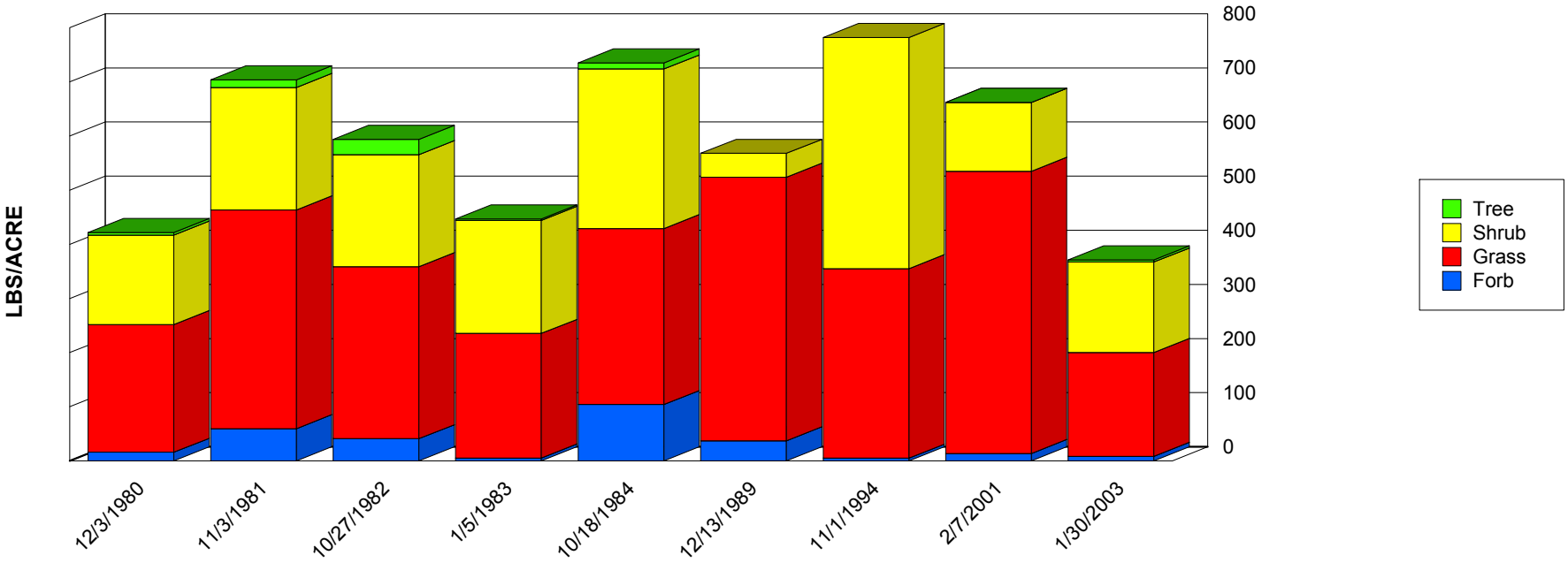
SITE NAME LIKE	65034-MESCALERO-D094
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY063NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	216	270	3.00	47.33	19.68	16.23
2	Grass	ANSC2	216	270	19.00	246.00	90.20	65.88
3	Grass	SPCR	216	270	6.00	64.00	17.86	17.88
4	Grass	BOHI2	144	180	14.00	167.20	42.06	45.01
5	Grass	ARIST	90	126	17.73	176.40	92.31	50.47
6	Grass	PAST6	72	108	2.00	33.00	11.90	12.18
8	Grass	LECO	18	54	14.67	61.00	33.73	16.96
8	Grass	PAHA	18	54	0.00	7.33	3.67	3.67
11	Grass	BOCU	54	90	4.02	50.00	19.88	13.79
12	Grass	BOER4	54	90	1.00	3.16	2.08	1.08
15	Grass	EROX	54	90	4.00	49.79	18.13	14.48
18	Grass	CAREX	0	18	1.00	2.56	1.78	0.78
19	Grass	AGSM	18	54	0.00	8.00	4.00	4.00
25	Forb	AMBRO	36	54	0.76	23.92	11.56	9.52
25	Forb	AMPS	36	54	0.00	45.00	12.59	18.84
26	Forb	AAFF	54	90	1.00	50.84	14.71	16.07
26	Forb	EUPHO	54	90	0.90	1.00	0.95	0.05
27	Forb	HYSC	18	54	0.00	3.31	1.66	1.66
27	Forb	PPFF	18	54	4.00	7.00	5.50	1.50
30	Shrub	QUHA3	0	216	44.00	313.00	194.50	77.80
38	Tree	YUEL	18	54	0.00	27.90	9.21	8.89

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV



Production Lbs/Acre Trends

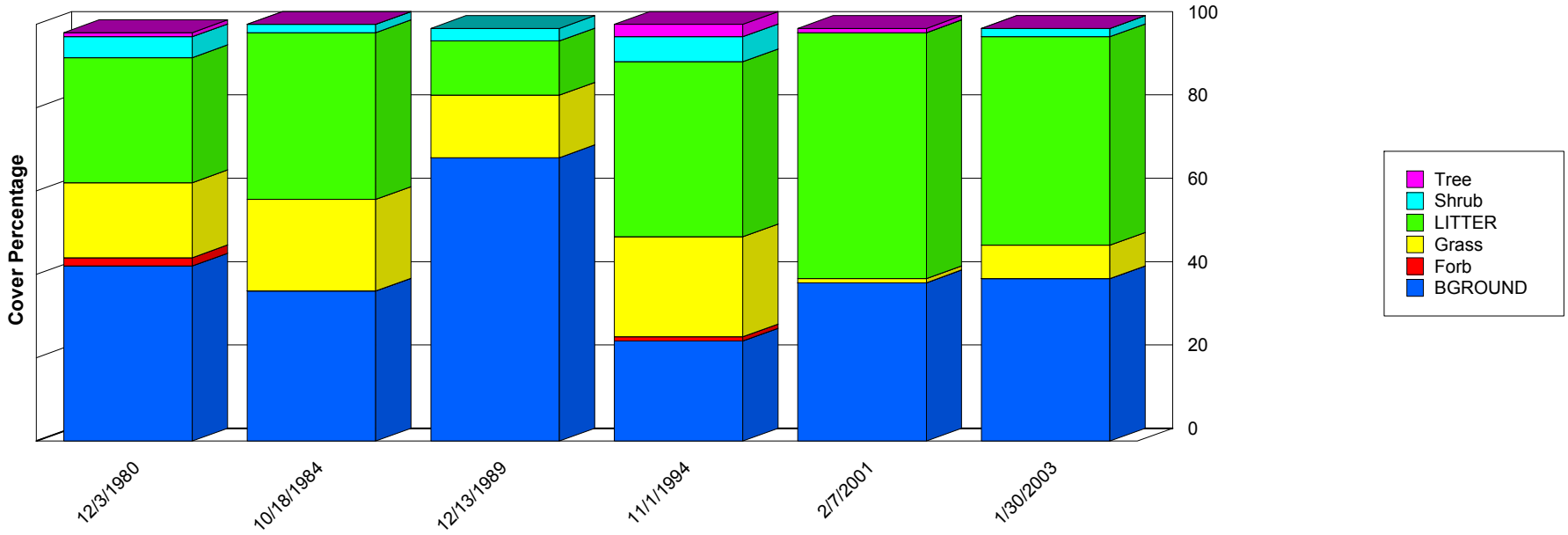


	12/3/1980	11/3/1981	10/27/1982	1/5/1983	10/18/1984	12/13/1989	11/1/1994	2/7/2001	1/30/2003
Forb	**16.00**	**59.54**	**41.02**	**5.36**	**104.00**	**37.00**	**5.00**	**13.65**	**8.51**
Grass	**236.00**	**404.00**	**317.54**	**230.12**	**325.00**	**487.00**	**350.00**	**521.24**	**191.88**
Shrub	**165.00**	**226.20**	**207.24**	**208.80**	**295.00**	**44.00**	**427.00**	**127.38**	**166.92**
Tree	**5.00**	**14.20**	**27.90**	**2.40**	**11.00**	**0.00**	**0.00**	**0.00**	**4.00**
Total	**422.00**	**703.94**	**593.70**	**446.68**	**735.00**	**568.00**	**782.00**	**662.27**	**371.31**

Report Parameters

SITE NAME LIKE	65034-MESCALERO-D094
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/18/1984	12/13/1989	11/1/1994	2/7/2001	1/30/2003
BGROUND	42.00	36.00	68.00	24.00	38.00	39.00
Forb	2.00	0.00	0.00	1.00	0.00	0.00
Grass	18.00	22.00	15.00	24.00	1.00	8.00
LITTER	30.00	40.00	13.00	42.00	59.00	50.00
Shrub	5.00	2.00	3.00	6.00	0.00	2.00
Tree	1.00	0.00	0.00	3.00	1.00	0.00
Total	98.00	100.00	99.00	100.00	99.00	99.00

Report Parameters

SITE NAME LIKE	65034-MESCALERO-D094
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

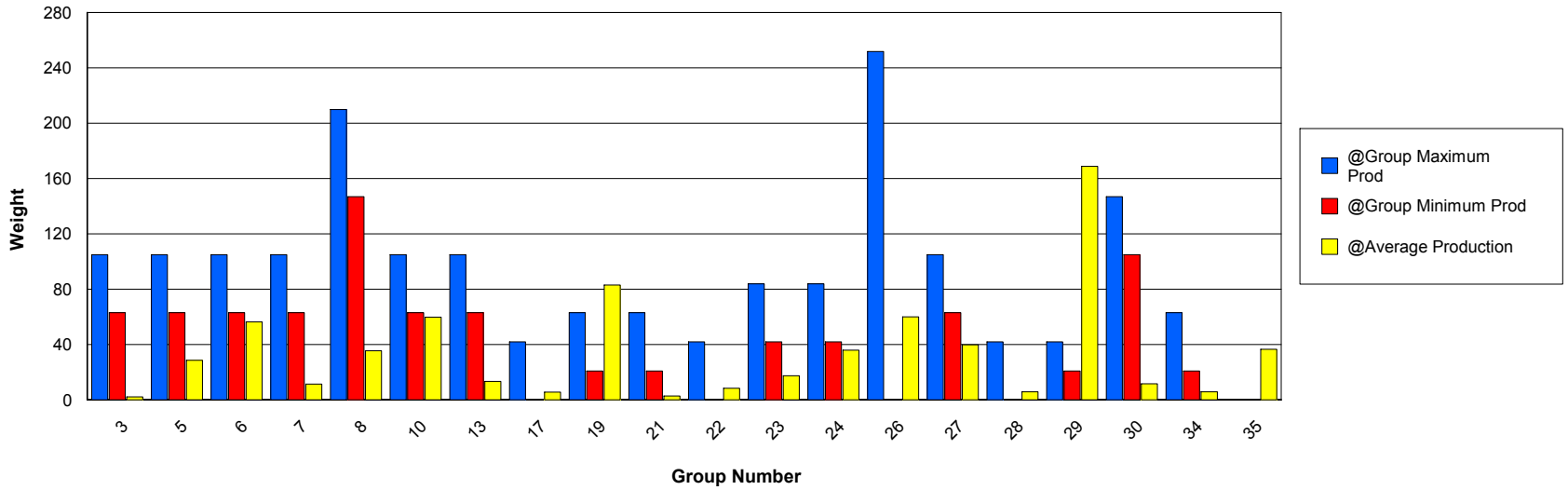
Functional / Structural Groups

Report Parameters

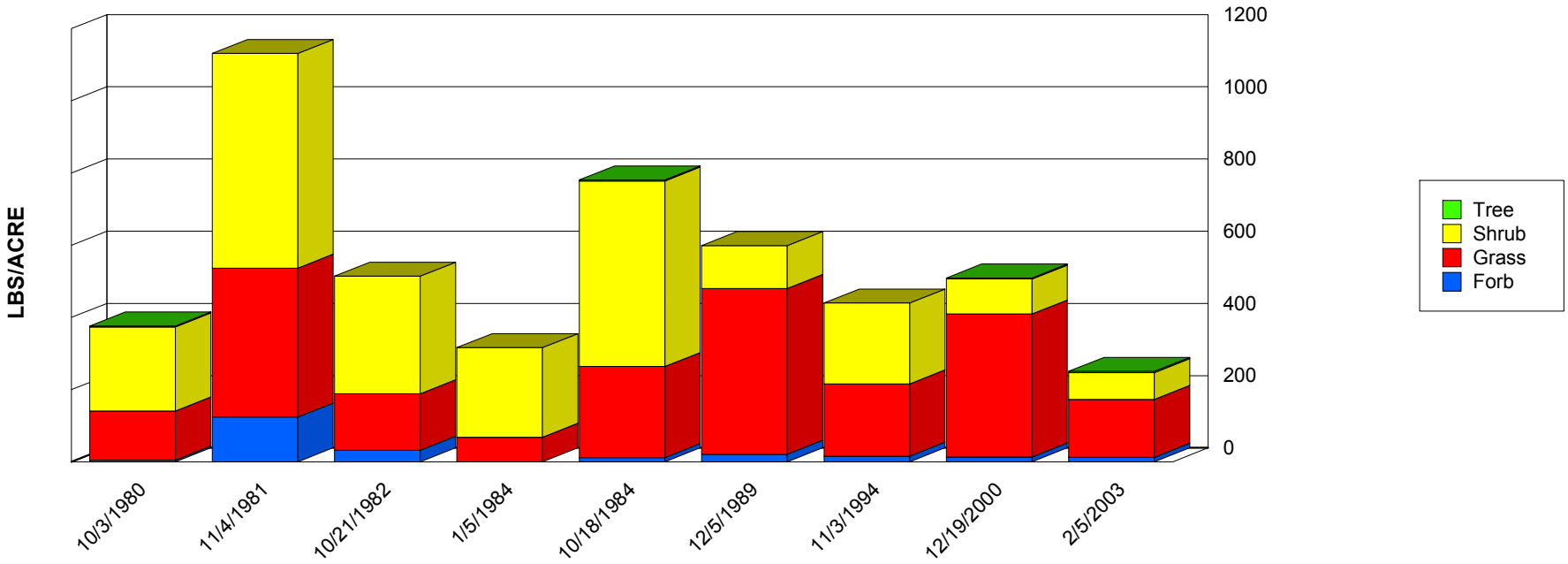
SITE NAME LIKE	65034-MIDDLE #1-D076
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY055NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
3	Grass	EROX	63	105	0.00	4.00	2.12	1.43
5	Grass	BOHI2	63	105	5.00	90.52	28.76	26.25
6	Grass	ARIST	63	105	2.72	165.01	56.44	50.54
7	Grass	LECO	63	105	1.27	30.99	11.45	10.65
8	Grass	SPCR	147	210	3.00	91.00	35.52	30.36
10	Grass	BOER4	63	105	19.14	134.30	59.75	33.87
13	Grass	BOCU	63	105	2.64	24.57	13.48	7.32
17	Grass	MUAR2	0	42	2.00	7.76	5.59	2.56
19	Grass	AGSM	21	63	0.00	15.87	7.93	7.93
19	Grass	BOGR2	21	63	7.60	136.00	34.66	38.55
19	Grass	HIMU2	21	63	0.00	15.87	7.93	7.93
19	Grass	LYPH	21	63	3.00	3.00	3.00	0.00
19	Grass	MUTO2	21	63	0.00	7.47	3.73	3.73
19	Grass	PAHA	21	63	1.33	12.96	7.15	5.81
19	Grass	SPFL2	21	63	11.16	26.00	18.58	7.42
21	Forb	ERIOG	21	63	1.68	4.00	2.84	1.16
22	Forb	AMPS	0	42	0.00	25.20	8.40	11.88
23	Forb	AAFF	42	84	1.00	14.00	5.75	4.97
23	Forb	ERAN	42	84	0.00	45.24	11.81	19.32
24	Forb	ASTER	42	84	0.00	4.90	2.45	2.45
24	Forb	LEFE	42	84	0.00	53.58	17.86	25.26
24	Forb	LESQU	42	84	0.00	6.91	3.46	3.46
24	Forb	MELE2	42	84	0.00	1.60	0.80	0.80
24	Forb	PPFF	42	84	7.00	12.00	9.97	2.15
24	Forb	SOEL	42	84	1.00	2.00	1.50	0.50
26	Shrub	QUHA3	0	252	14.00	107.00	60.01	30.89

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
27	Shrub	YUCCA	63	105	6.00	68.00	37.00	31.00
27	Tree	YUEL	63	105	2.00	3.33	2.75	0.49
28	Shrub	EPHED	0	42	0.00	11.80	5.90	5.90
29	Shrub	GUSA2	21	42	9.47	440.80	168.79	141.37
30	Shrub	ARFI2	105	147	0.00	52.80	11.64	20.62
34	Shrub	DAFO	21	63	0.00	17.80	5.93	8.39
35	Shrub	PRGL2	0	0	15.00	98.00	36.63	30.92



Production Lbs/Acre Trends

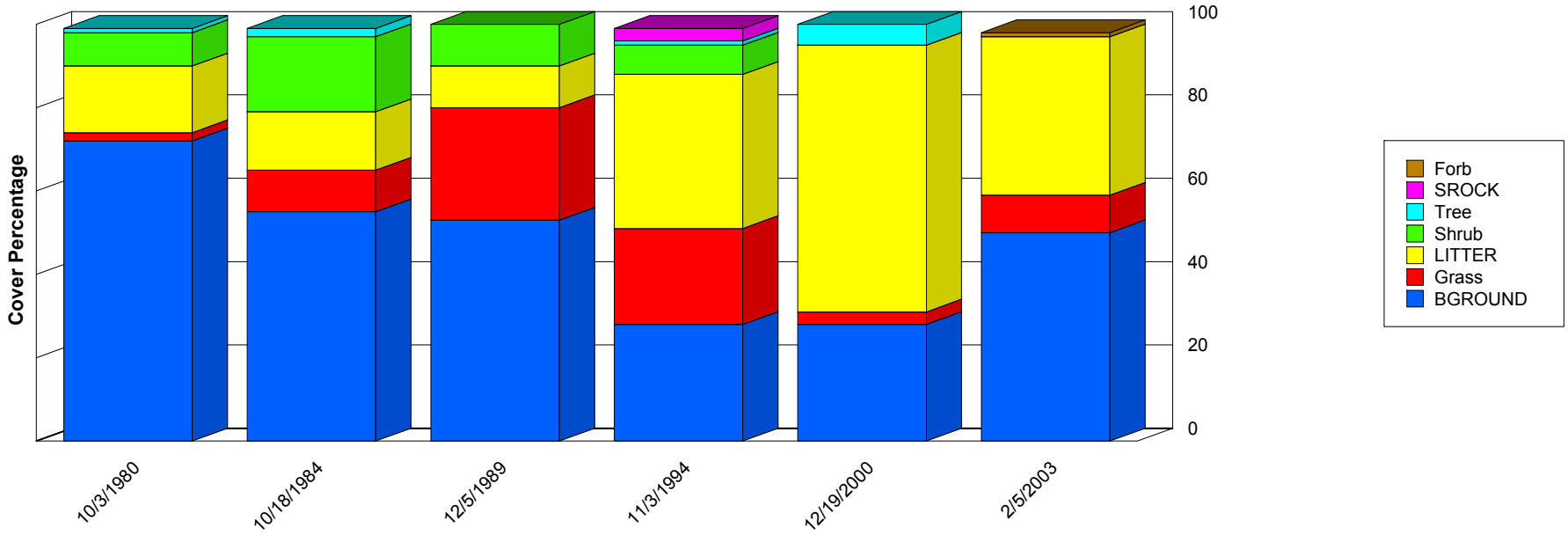


	10/3/1980	11/4/1981	10/21/1982	1/5/1984	10/18/1984	12/5/1989	11/3/1994	12/19/2000	2/5/2003
Forb	**5.00**	**124.02**	**32.32**	**0.00**	**12.00**	**21.00**	**16.00**	**13.41**	**12.60**
Grass	**136.00**	**412.42**	**156.32**	**68.02**	**252.00**	**459.00**	**200.00**	**396.09**	**160.48**
Shrub	**233.00**	**594.92**	**325.60**	**248.38**	**514.00**	**119.00**	**224.00**	**96.82**	**74.40**
Tree	**2.00**	**0.00**	**0.00**	**0.00**	**3.00**	**0.00**	**0.00**	**2.67**	**3.33**
Total	**376.00**	**1,131.36**	**514.24**	**316.40**	**781.00**	**599.00**	**440.00**	**508.99**	**250.81**

Report Parameters

SITE NAME LIKE	65034-MIDDLE #1-D076
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	10/3/1980	10/18/1984	12/5/1989	11/3/1994	12/19/2000	2/5/2003
BGROUND	72.00	55.00	53.00	28.00	28.00	50.00
Forb	0.00	0.00	0.00	0.00	0.00	1.00
Grass	2.00	10.00	27.00	23.00	3.00	9.00
LITTER	16.00	14.00	10.00	37.00	64.00	38.00
Shrub	8.00	18.00	10.00	7.00	0.00	0.00
SROCK	0.00	0.00	0.00	3.00	0.00	0.00
Tree	1.00	2.00	0.00	1.00	5.00	0.00

	10/3/1980	10/18/1984	12/5/1989	11/3/1994	12/19/2000	2/5/2003
Total	99.00	99.00	100.00	99.00	100.00	98.00

Report Parameters

SITE NAME LIKE	65034-MIDDLE #1-D076
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

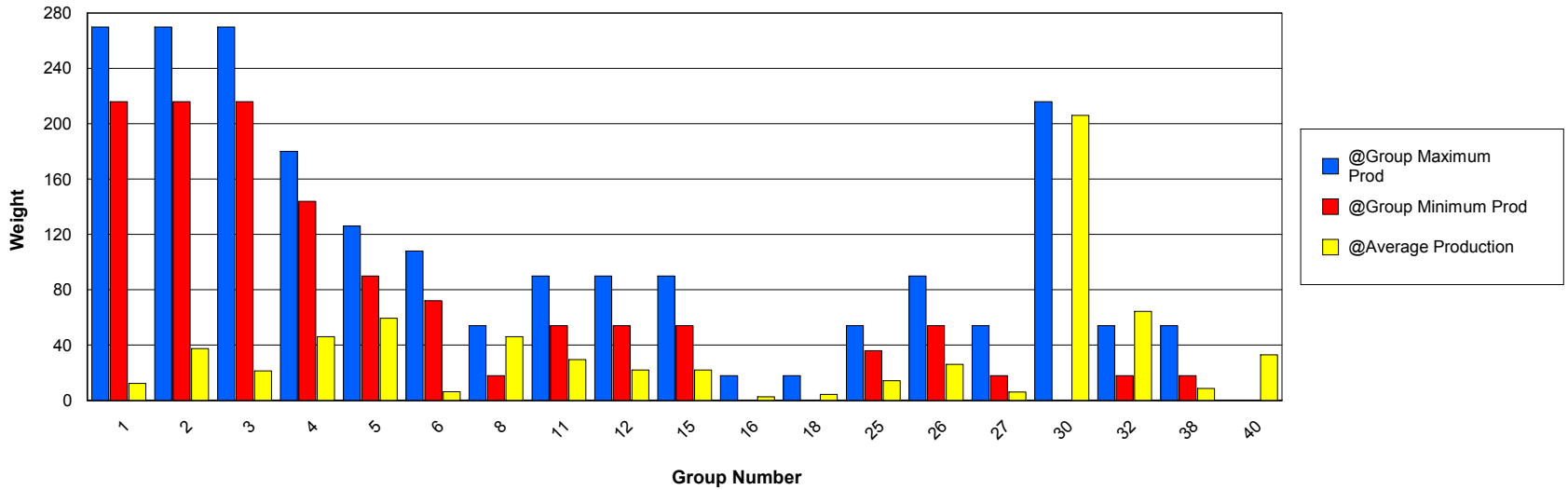
Functional / Structural Groups

Report Parameters

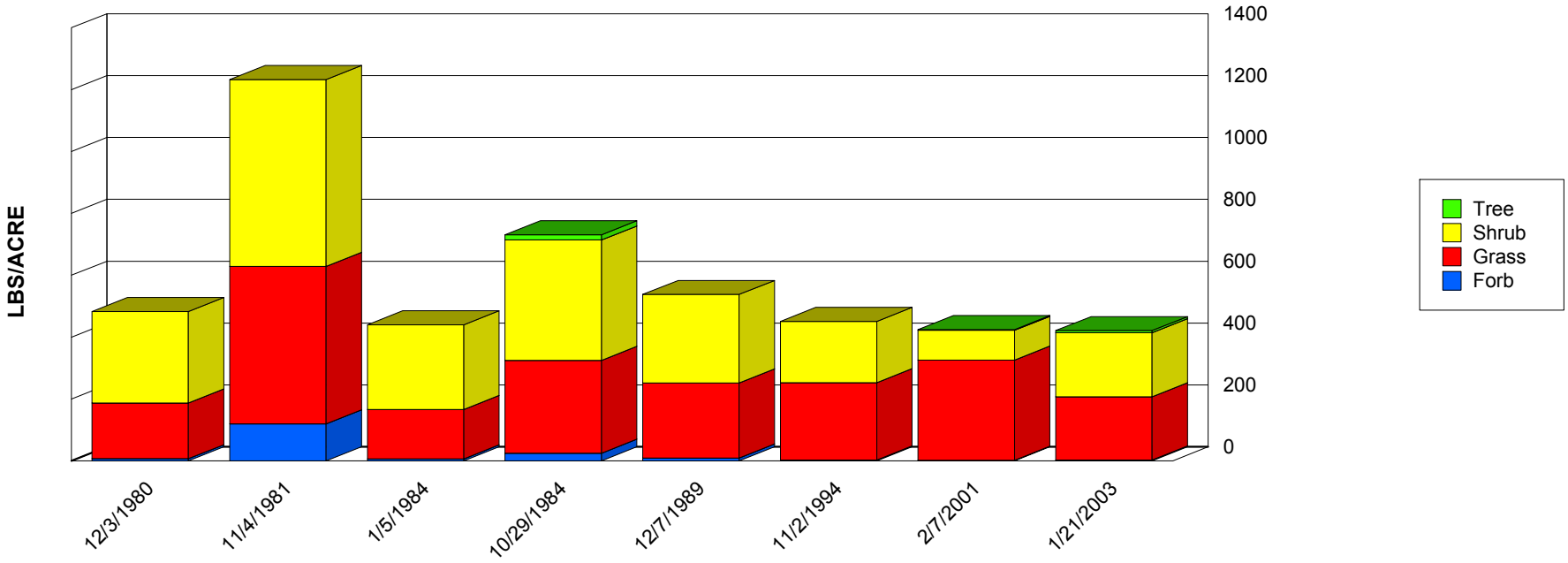
SITE NAME LIKE	65034-N. ANTELOPE #7-D082
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY063NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	216	270	0.00	31.00	12.34	10.42
2	Grass	ANSC2	216	270	10.00	77.00	37.53	22.76
3	Grass	SPCR	216	270	18.00	32.00	21.43	4.47
4	Grass	BOHI2	144	180	15.66	105.12	46.09	28.32
5	Grass	ARIST	90	126	32.30	156.00	59.37	37.98
6	Grass	PAST6	72	108	0.00	16.00	6.20	5.31
8	Grass	LECO	18	54	3.00	146.30	46.19	41.24
11	Grass	BOCU	54	90	7.00	55.00	29.47	16.65
12	Grass	BOER4	54	90	12.00	32.00	22.00	10.00
15	Grass	EROX	54	90	0.00	47.00	22.05	16.16
16	Grass	ERSE2	0	18	0.00	8.04	2.61	2.95
18	Grass	CAPR5	0	18	0.00	5.33	2.67	2.67
18	Grass	CAREX	0	18	0.00	5.68	1.67	2.35
25	Forb	AMPS	36	54	0.00	42.00	14.25	17.15
26	Forb	AAFF	54	90	0.00	9.00	3.48	3.18
26	Forb	ERAN	54	90	0.00	67.86	22.62	31.99
27	Forb	MELE2	18	54	2.00	5.00	3.50	1.50
27	Forb	PPFF	18	54	0.00	9.84	2.57	3.71
30	Shrub	QUHA3	0	216	79.86	302.76	206.13	80.40
32	Shrub	GUSA2	18	54	2.27	301.60	64.45	99.29
38	Tree	YUEL	18	54	2.00	17.00	8.56	6.27
40	Shrub	PRGL2	0	0	0.00	67.00	32.87	25.47

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV



Production Lbs/Acre Trends

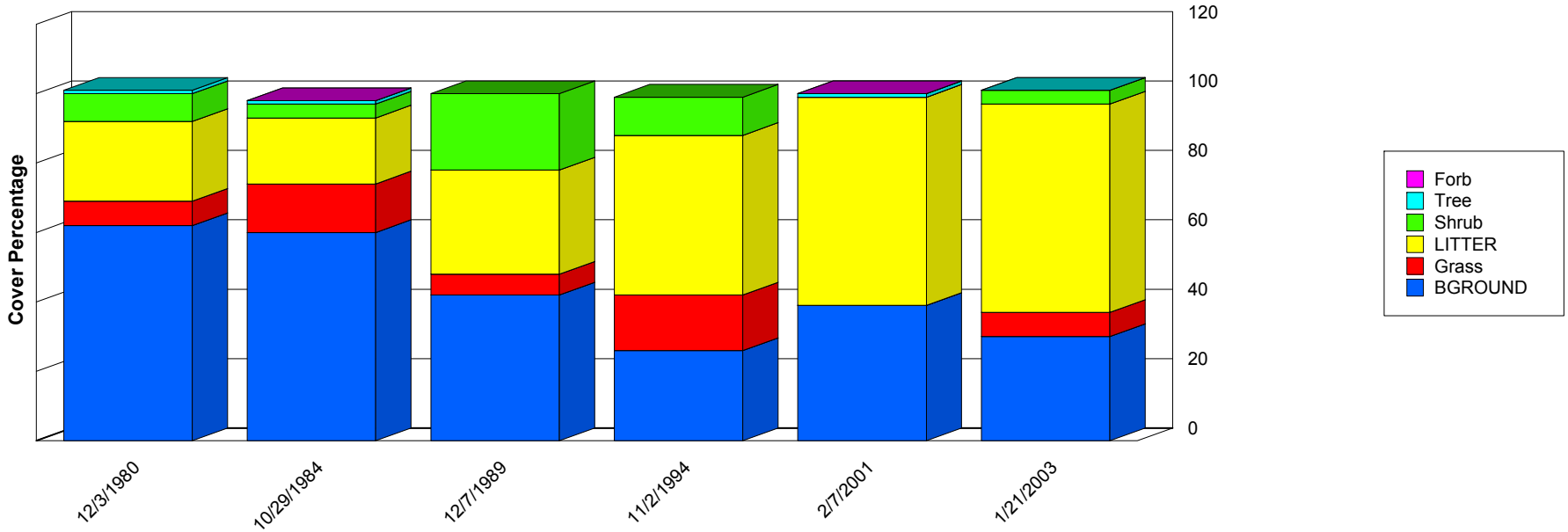


	12/3/1980	11/4/1981	1/5/1984	10/29/1984	12/7/1989	11/2/1994	2/7/2001	1/21/2003
Forb	**7.00**	**119.70**	**6.70**	**25.00**	**9.00**	**3.00**	**1.65**	**2.79**
Grass	**180.00**	**508.82**	**159.70**	**300.00**	**243.00**	**250.00**	**323.91**	**204.23**
Shrub	**296.00**	**604.36**	**273.18**	**389.00**	**286.00**	**198.00**	**96.51**	**207.49**
Tree	**0.00**	**0.00**	**0.00**	**17.00**	**0.00**	**0.00**	**2.00**	**6.67**
Total	**483.00**	**1,232.88**	**439.58**	**731.00**	**538.00**	**451.00**	**424.07**	**421.17**

Report Parameters

SITE NAME LIKE	65034-N. ANTELOPE #7-D082
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/29/1984	12/7/1989	11/2/1994	2/7/2001	1/21/2003
BGROUND	62.00	60.00	42.00	26.00	39.00	30.00
Forb	0.00	0.00	0.00	0.00	0.00	0.00
Grass	7.00	14.00	6.00	16.00	0.00	7.00
LITTER	23.00	19.00	30.00	46.00	60.00	60.00
Shrub	8.00	4.00	22.00	11.00	0.00	4.00
Tree	1.00	1.00	0.00	0.00	1.00	0.00
Total	101.00	98.00	100.00	99.00	100.00	101.00

Report Parameters

SITE NAME LIKE	65034-N. ANTELOPE #7-D082
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

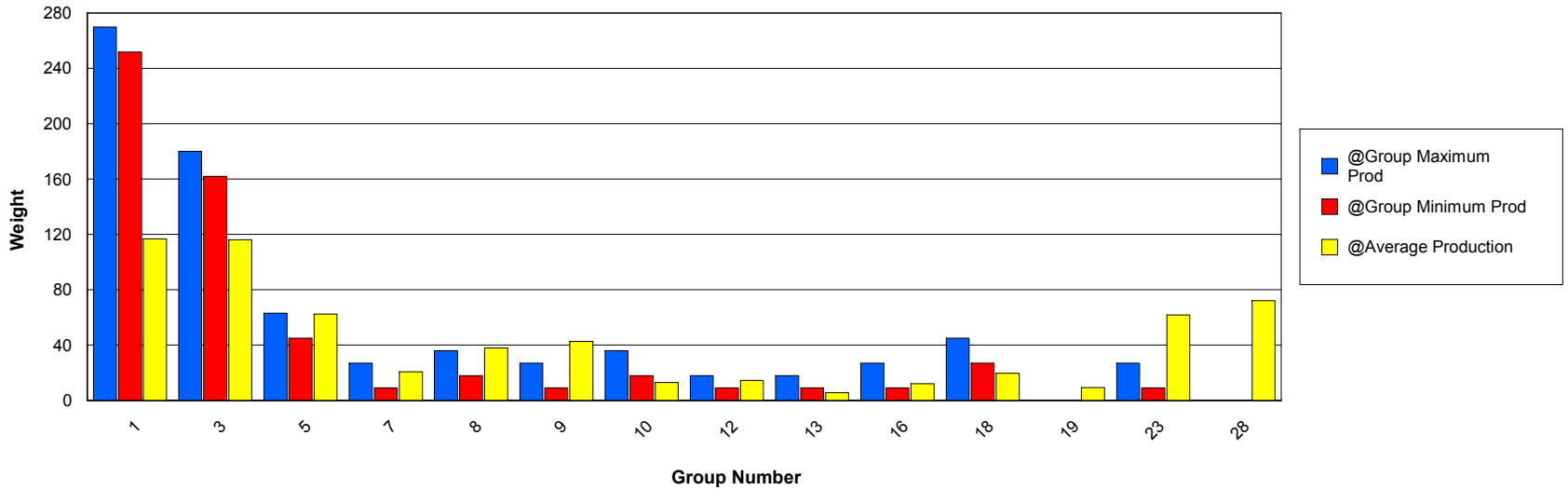
Functional / Structural Groups

Report Parameters

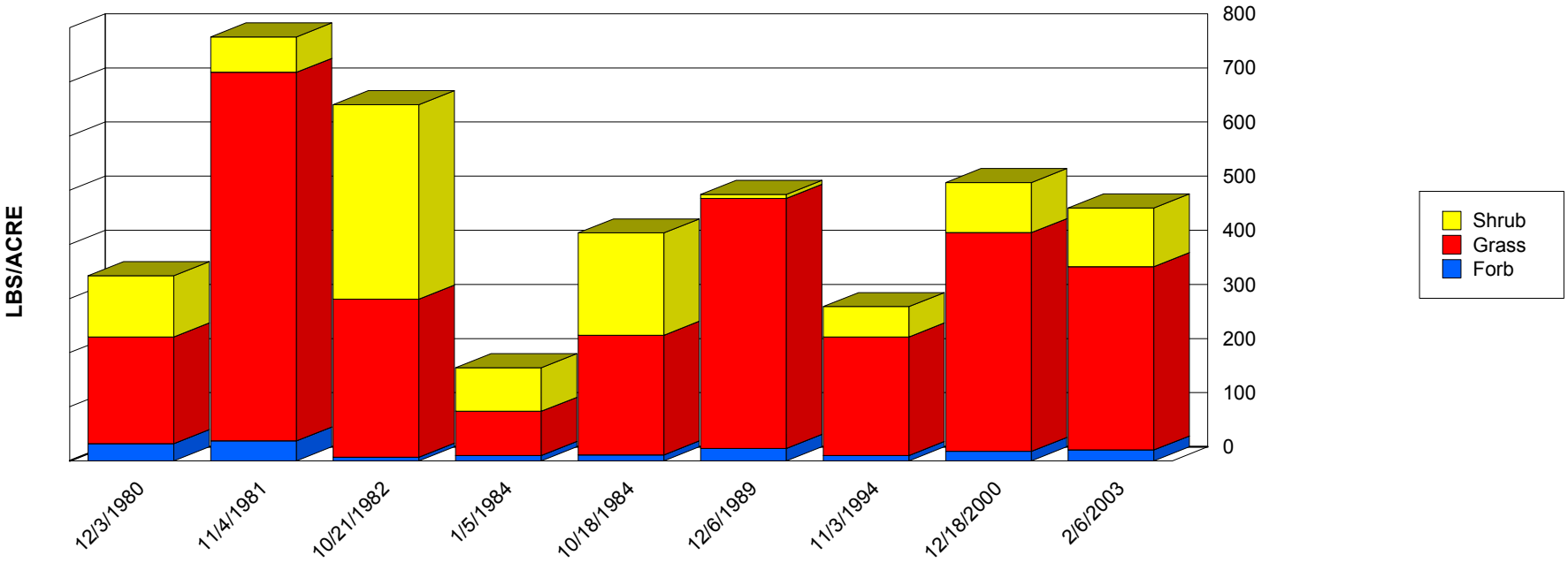
SITE NAME LIKE	65034-PRESLER #3-D078
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY053NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOGR2	252	270	0.00	547.20	116.76	159.37
3	Grass	HIJA	162	180	0.00	116.17	58.08	58.08
3	Grass	HIMU2	162	180	6.96	175.47	58.05	57.70
5	Grass	BOER4	45	63	12.18	168.00	62.49	55.14
7	Grass	MUTO2	9	27	0.00	77.44	20.65	32.86
8	Grass	MUAR	18	36	1.19	35.96	9.63	13.27
8	Grass	MUAR2	18	36	19.00	60.00	28.34	15.85
9	Grass	SCBR2	9	27	5.00	90.19	42.75	26.45
10	Grass	PAOB	18	36	4.00	29.00	13.05	8.54
12	Grass	ARIST	9	18	1.36	57.03	14.44	17.33
13	Grass	SPCR	9	18	0.00	18.00	5.57	7.01
16	Grass	BOHI2	9	27	2.64	4.00	3.32	0.68
16	Grass	LECO	9	27	0.00	8.30	4.15	4.15
16	Grass	MUPO2	9	27	4.00	6.00	4.67	0.94
18	Forb	CROTO	27	45	0.00	5.00	2.57	2.01
18	Forb	CRPO5	27	45	0.00	7.93	4.64	3.38
18	Forb	PENA	27	45	0.78	12.00	6.04	4.48
18	Forb	SPHAE	27	45	3.08	6.00	4.54	1.46
18	Forb	VEBI	27	45	0.00	0.33	0.16	0.16
18	Forb	VERBE	27	45	0.00	4.92	1.64	2.32
19	Forb	AAFF	0	0	0.00	26.24	9.21	8.85
23	Shrub	GUSA2	9	27	7.00	177.02	61.72	64.73
28	Shrub	PRGL2	0	0	26.00	182.16	72.18	48.09

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV



Production Lbs/Acre Trends

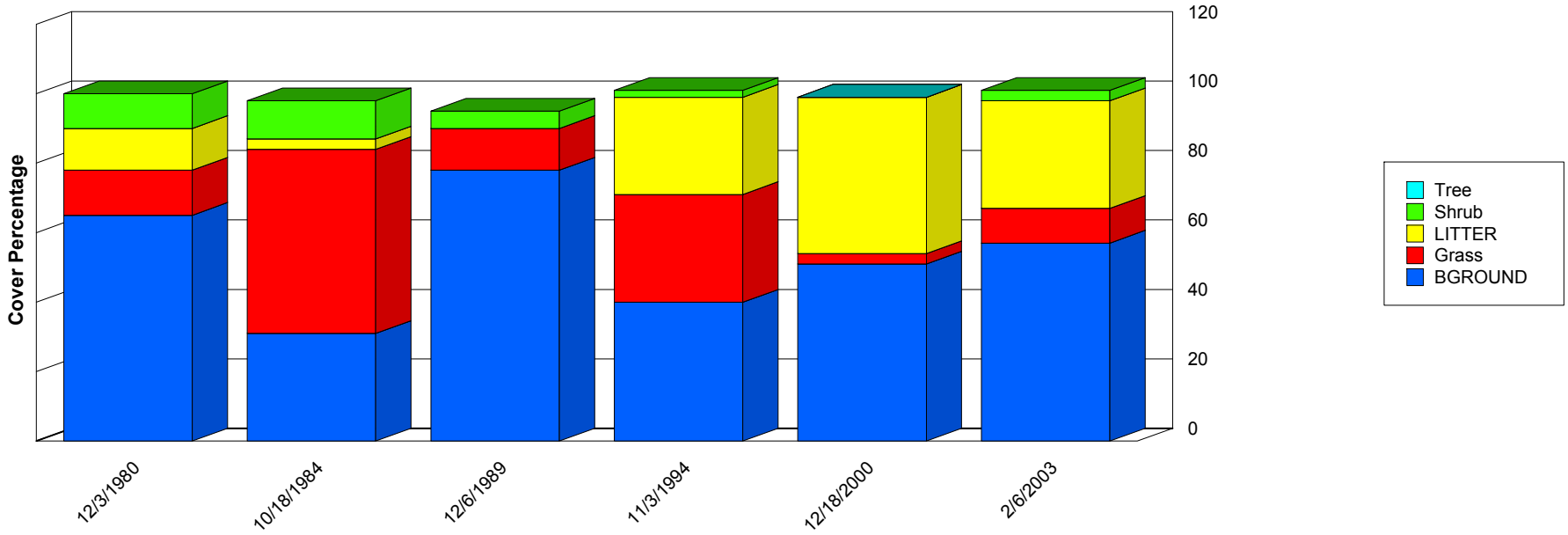


	12/3/1980	11/4/1981	10/21/1982	1/5/1984	10/18/1984	12/6/1989	11/3/1994	12/18/2000	2/6/2003
Forb	**32.00**	**36.80**	**6.68**	**10.04**	**11.00**	**23.00**	**10.00**	**17.54**	**20.15**
Grass	**197.00**	**680.80**	**292.10**	**81.60**	**221.00**	**462.00**	**219.00**	**403.95**	**338.57**
Shrub	**113.00**	**65.68**	**359.18**	**80.40**	**189.00**	**7.00**	**56.00**	**92.57**	**108.40**
Total	**342.00**	**783.28**	**657.96**	**172.04**	**421.00**	**492.00**	**285.00**	**514.06**	**467.13**

Report Parameters

SITE NAME LIKE	65034-PRESLER #3-D078
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/18/1984	12/6/1989	11/3/1994	12/18/2000	2/6/2003
BGROUND	65.00	31.00	78.00	40.00	51.00	57.00
Grass	13.00	53.00	12.00	31.00	3.00	10.00
LITTER	12.00	3.00	0.00	28.00	45.00	31.00
Shrub	10.00	11.00	5.00	2.00	0.00	3.00
Tree	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	98.00	95.00	101.00	99.00	101.00

Report Parameters

SITE NAME LIKE	65034-PRESLER #3-D078
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

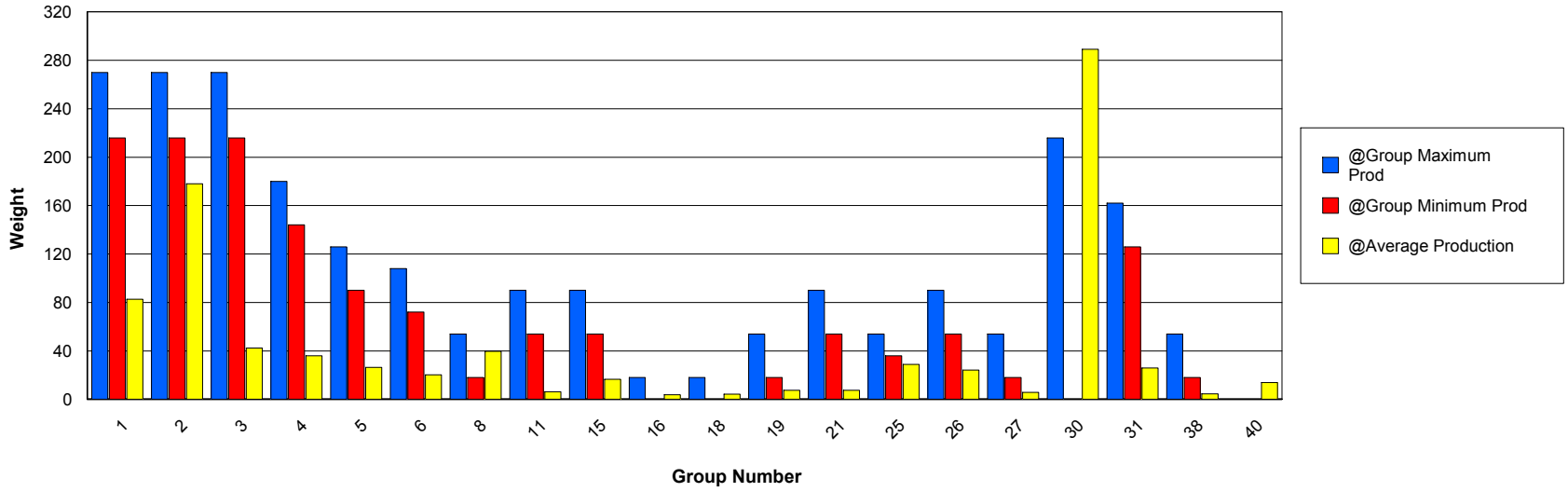
Functional / Structural Groups

Report Parameters

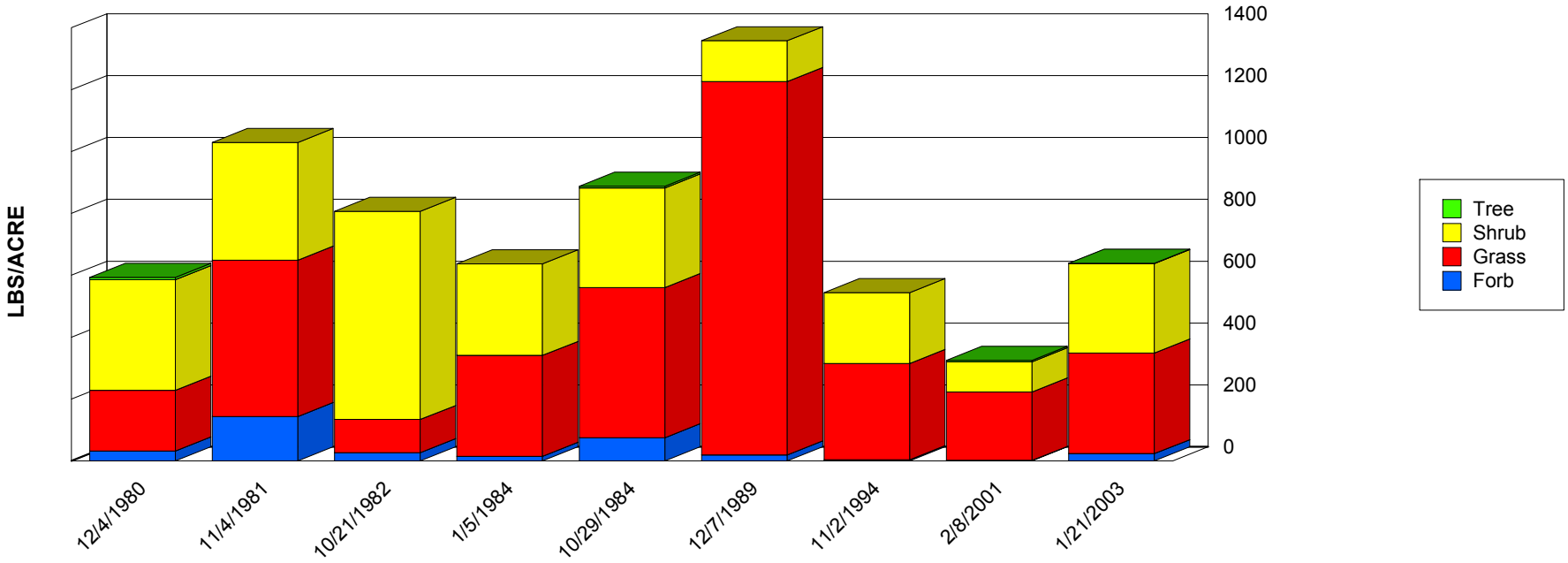
SITE NAME LIKE	65034-S. ANTELOPE #8-D083
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY063NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	216	270	50.00	191.00	82.75	45.67
2	Grass	ANSC2	216	270	24.20	922.00	178.13	270.38
3	Grass	SPCR	216	270	1.94	66.00	26.96	18.29
3	Grass	SPFL2	216	270	11.00	19.80	15.40	4.40
4	Grass	BOHI2	144	180	12.18	105.12	35.98	27.74
5	Grass	ARIST	90	126	9.50	68.64	26.30	17.19
6	Grass	PAST6	72	108	2.84	106.92	20.12	31.27
8	Grass	LECO	18	54	10.00	100.10	39.63	25.95
9	Grass	MUSQ	0	36	0.00	1.84	0.61	0.87
11	Grass	BOCU	54	90	1.00	16.47	6.21	5.35
15	Grass	EROX	54	90	2.00	39.00	16.43	14.15
16	Grass	ERSE2	0	18	3.00	4.00	3.67	0.47
18	Grass	CAPR5	0	18	0.00	6.67	3.33	3.33
18	Grass	CAREX	0	18	0.00	2.84	1.02	1.05
19	Grass	AGSM	18	54	0.00	14.67	7.33	7.33
21	Forb	ERIOG	54	90	1.00	13.93	7.47	6.47
25	Forb	AMPS	36	54	0.00	75.60	28.89	29.08
26	Forb	AAFF	54	90	1.00	19.00	6.83	6.73
26	Forb	ERAN	54	90	0.00	67.86	17.22	29.24
27	Forb	CRJA2	18	54	0.00	9.00	3.33	4.03
27	Forb	HYSC	18	54	0.00	0.47	0.24	0.24
27	Forb	PPFF	18	54	2.00	2.28	2.14	0.14
30	Shrub	QUHA3	0	216	93.72	672.84	289.09	159.97
31	Shrub	ARFI2	126	162	1.00	72.00	26.00	32.57
38	Tree	YUEL	18	54	0.67	7.00	4.58	2.41
40	Shrub	PRGL2	0	0	0.00	40.00	13.80	15.65

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV



Production Lbs/Acre Trends

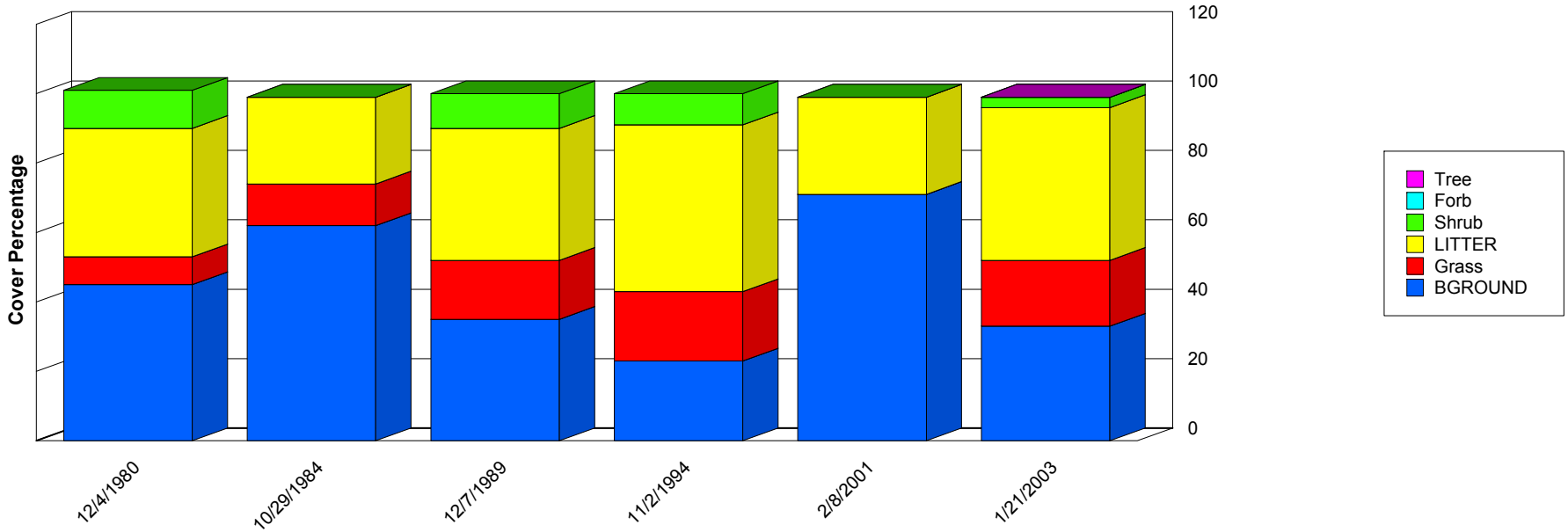


	12/4/1980	11/4/1981	10/21/1982	1/5/1984	10/29/1984	12/7/1989	11/2/1994	2/8/2001	1/21/2003
Forb	**32.00**	**143.46**	**26.76**	**14.74**	**75.00**	**19.00**	**4.00**	**1.47**	**23.47**
Grass	**196.00**	**505.50**	**106.96**	**326.18**	**485.00**	**1,207.00**	**311.00**	**221.09**	**325.02**
Shrub	**358.00**	**380.08**	**672.84**	**295.80**	**322.00**	**132.00**	**229.00**	**97.72**	**289.54**
Tree	**7.00**	**0.00**	**0.00**	**0.00**	**6.00**	**0.00**	**0.00**	**4.67**	**0.67**
Total	**593.00**	**1,029.04**	**806.56**	**636.72**	**888.00**	**1,358.00**	**544.00**	**324.95**	**638.69**

Report Parameters

SITE NAME LIKE	65034-S. ANTELOPE #8-D083
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/4/1980	10/29/1984	12/7/1989	11/2/1994	2/8/2001	1/21/2003
BGROUND	45.00	62.00	35.00	23.00	71.00	33.00
Forb	0.00	0.00	0.00	0.00	0.00	0.00
Grass	8.00	12.00	17.00	20.00	0.00	19.00
LITTER	37.00	25.00	38.00	48.00	28.00	44.00
Shrub	11.00	0.00	10.00	9.00	0.00	3.00
Tree	0.00	0.00	0.00	0.00	0.00	0.00
Total	101.00	99.00	100.00	100.00	99.00	99.00

Report Parameters

SITE NAME LIKE	65034-S. ANTELOPE #8-D083
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

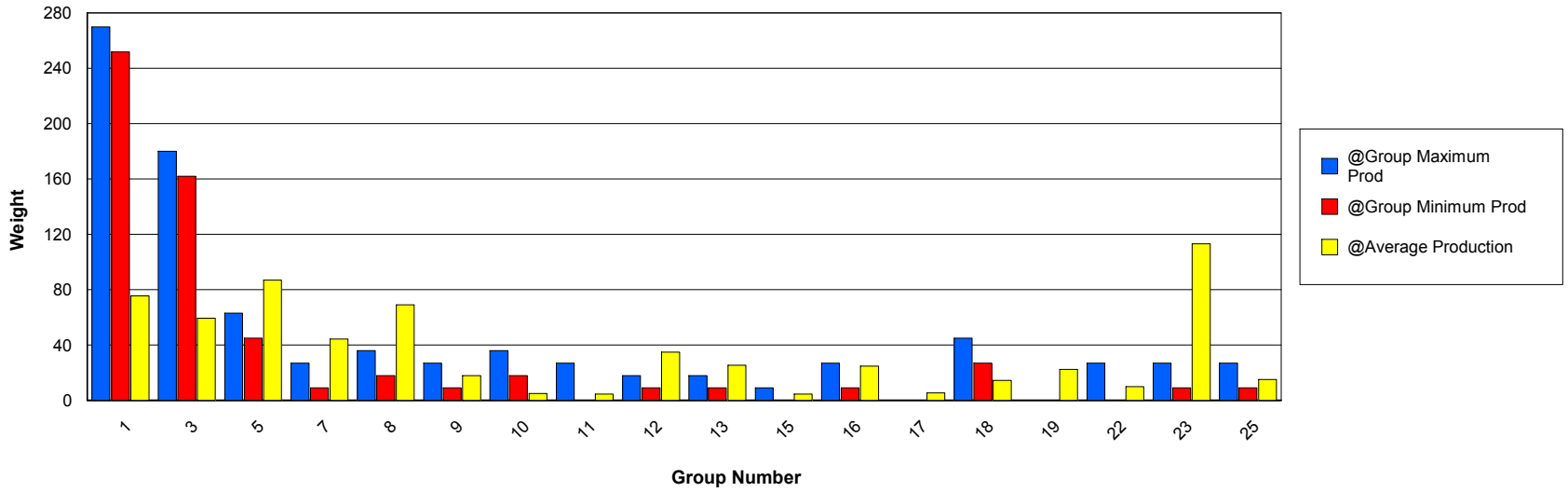
Functional / Structural Groups

Report Parameters

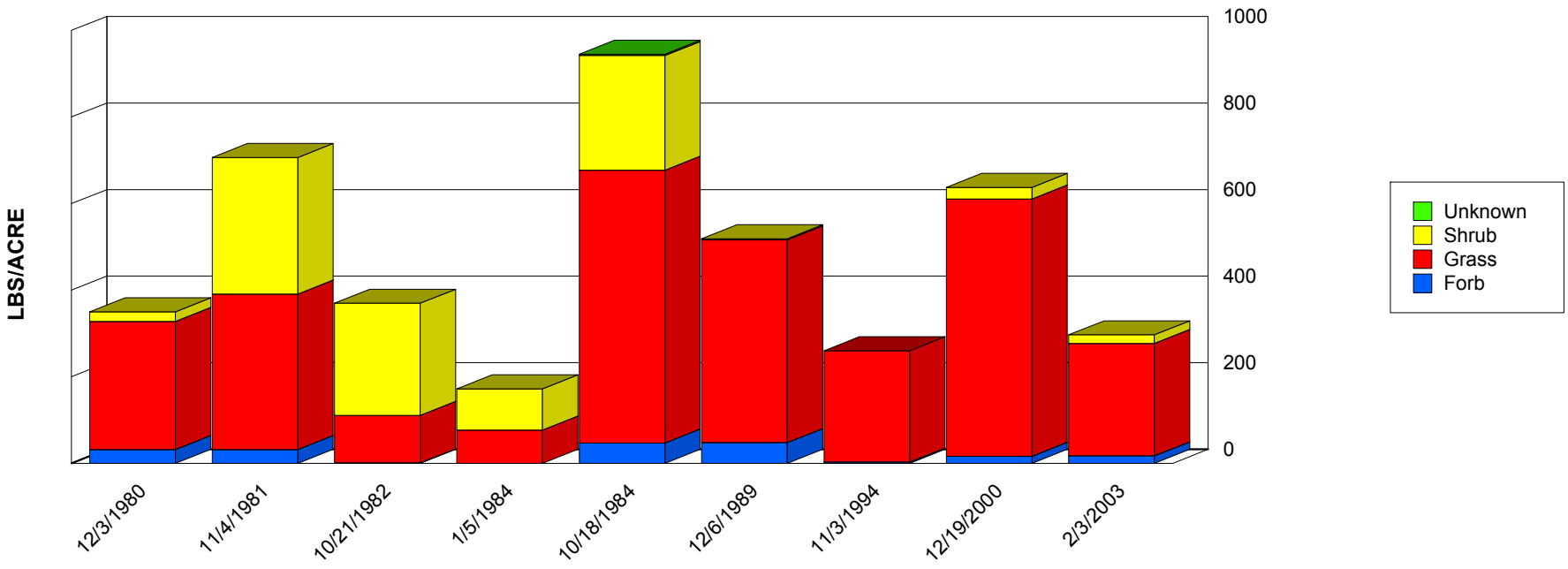
SITE NAME LIKE	65034-WEANING #2-D077
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY053NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOGR2	252	270	3.60	206.00	75.50	61.13
3	Grass	HIJA	162	180	0.00	33.12	11.04	15.61
3	Grass	HIMU2	162	180	2.64	135.00	48.43	38.96
4	Grass	BOCU	45	63	0.00	3.17	1.58	1.58
5	Grass	BOER4	45	63	20.88	171.13	86.96	43.04
7	Grass	MUTO2	9	27	0.00	70.40	44.44	31.57
8	Grass	MUAR	18	36	3.00	11.60	7.33	3.19
8	Grass	MUAR2	18	36	10.99	134.00	46.60	44.53
8	Grass	MUHLE	18	36	0.00	30.51	15.25	15.25
9	Grass	SCBR2	9	27	2.00	53.00	17.89	19.02
10	Grass	PAOB	18	36	0.00	13.12	4.95	4.93
11	Grass	AGSM	0	27	0.00	9.07	4.53	4.53
12	Grass	ARIST	9	18	2.00	128.61	34.97	39.42
13	Grass	SPCR	9	18	5.00	75.00	25.45	21.02
15	Grass	AAGG	0	9	0.00	9.33	4.67	4.67
16	Grass	LECO	9	27	0.00	38.18	19.09	19.09
16	Grass	SEMA5	9	27	0.00	3.20	1.60	1.60
16	Grass	TRPI2	9	27	0.00	9.24	4.05	4.21
17	Grass	ERPU8	0	0	0.00	16.40	5.47	7.73
18	Forb	ALUN	27	45	0.00	1.63	0.82	0.82
18	Forb	CRPO5	27	45	0.00	14.00	5.53	6.08
18	Forb	PENA	27	45	0.00	10.00	3.43	3.81
18	Forb	PPFF	27	45	0.00	8.60	3.87	3.56
18	Forb	SOEL	27	45	0.00	2.00	0.88	0.83
19	Forb	AAFF	0	0	0.00	43.00	22.35	16.93
22	Shrub	OPIM	0	27	0.00	20.00	10.00	10.00

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
23	Shrub	GUSA2	9	27	3.00	262.00	113.24	112.45
25	Shrub	OPUNT	9	27	0.00	72.00	15.13	28.45
28	Shrub	PRGL2	0	0	0.00	3.00	1.50	1.50



Production Lbs/Acre Trends

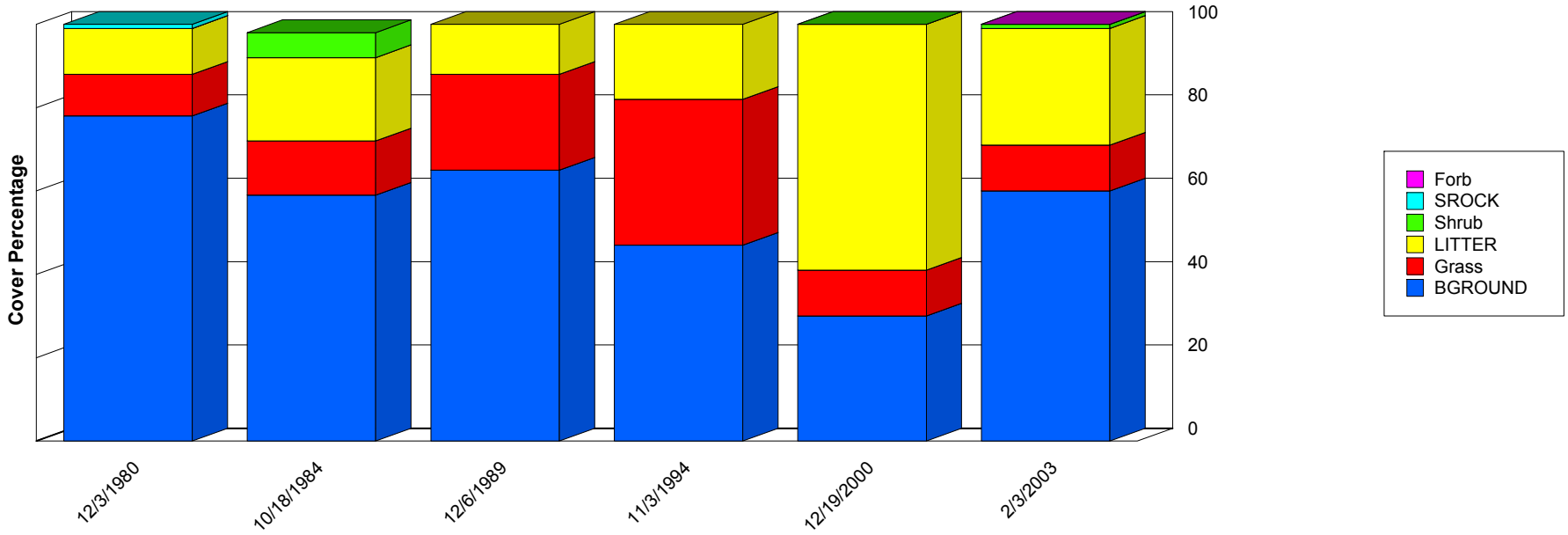


	12/3/1980	11/4/1981	10/21/1982	1/5/1984	10/18/1984	12/6/1989	11/3/1994	12/19/2000	2/3/2003
Forb	**32.00**	**31.86**	**1.08**	**0.00**	**47.00**	**48.00**	**3.00**	**16.29**	**17.44**
Grass	**296.00**	**359.02**	**109.72**	**77.16**	**630.00**	**468.00**	**257.00**	**594.43**	**259.51**
Shrub	**22.00**	**315.60**	**259.16**	**95.14**	**265.00**	**3.00**	**0.00**	**26.79**	**19.88**
Unknown	**0.00**	**0.00**	**0.00**	**0.00**	**3.00**	**0.00**	**0.00**	**0.00**	**0.00**
Total	**350.00**	**706.48**	**369.96**	**172.30**	**945.00**	**519.00**	**260.00**	**637.50**	**296.83**

Report Parameters

SITE NAME LIKE	65034-WEANING #2-D077
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/18/1984	12/6/1989	11/3/1994	12/19/2000	2/3/2003
BGROUND	78.00	59.00	65.00	47.00	30.00	60.00
Forb	0.00	0.00	0.00	0.00	0.00	0.00
Grass	10.00	13.00	23.00	35.00	11.00	11.00
LITTER	11.00	20.00	12.00	18.00	59.00	28.00
Shrub	0.00	6.00	0.00	0.00	0.00	1.00
SROCK	1.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	98.00	100.00	100.00	100.00	100.00

Report Parameters

SITE NAME LIKE	65034-WEANING #2-D077
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

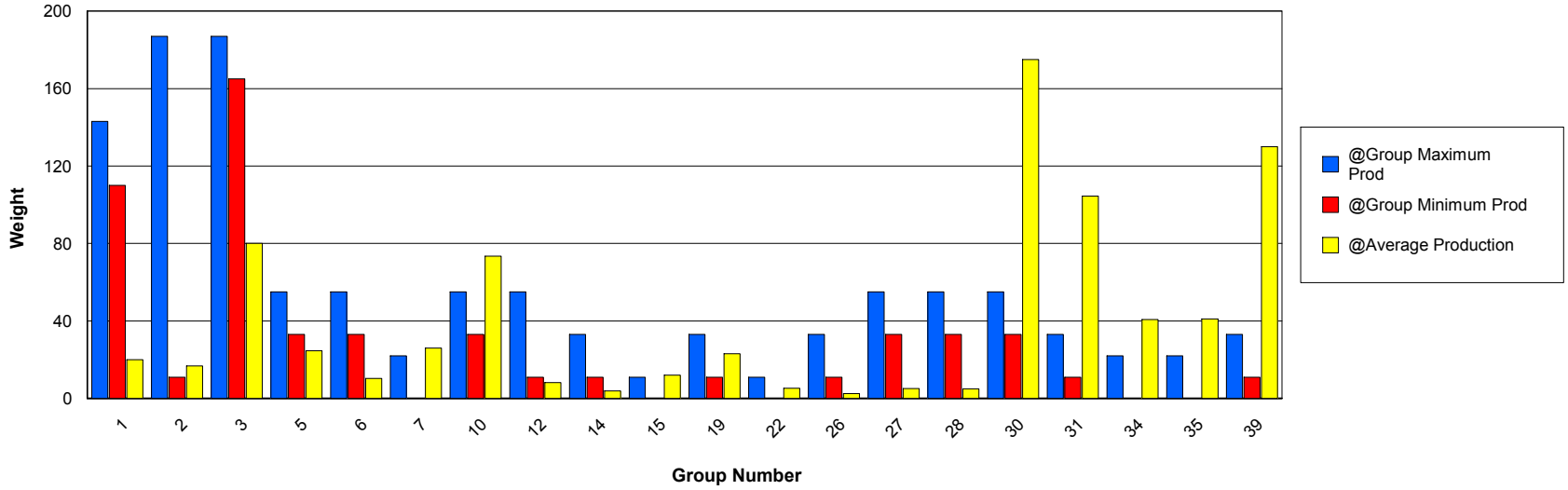
Functional / Structural Groups

Report Parameters

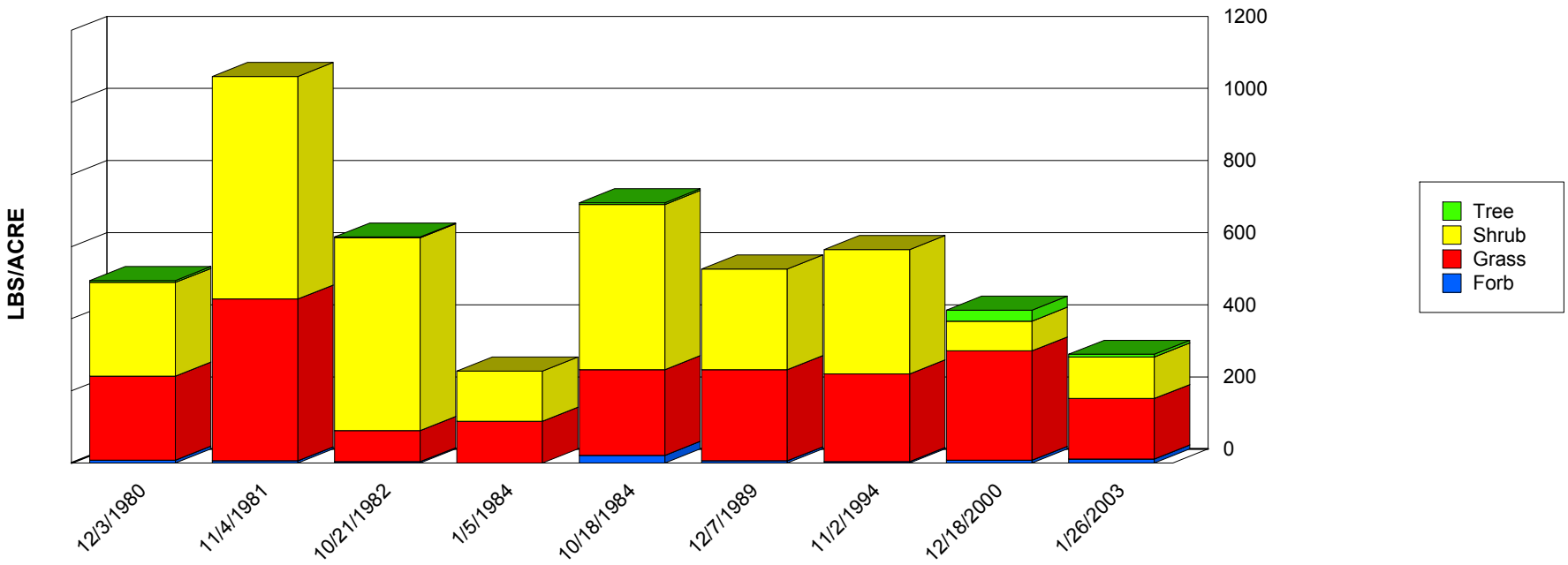
SITE NAME LIKE	65034-WEST #6-D081
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY054NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANSC2	110	143	2.00	32.00	12.81	13.60
1	Grass	BOSA	110	143	1.96	12.00	7.24	3.97
2	Grass	BOCU	11	187	5.07	53.83	16.78	14.73
3	Grass	BOER4	165	187	5.22	63.47	28.67	17.13
3	Grass	BOGR2	165	187	2.64	3.00	2.82	0.18
3	Grass	BOHI2	165	187	9.97	157.68	48.61	45.64
5	Grass	SPCR	33	55	4.64	36.00	24.65	8.27
6	Grass	EROX	33	55	2.00	32.40	10.30	9.96
7	Grass	LECO	0	22	10.00	55.89	25.98	16.98
10	Grass	ARIST	33	55	0.00	90.00	52.01	28.99
10	Grass	ARLO3	33	55	0.00	43.07	21.54	21.54
12	Grass	MUPO2	11	55	4.64	15.00	8.21	4.80
14	Grass	CHCU2	11	33	0.00	11.34	3.84	4.63
15	Grass	ERSE2	0	11	8.00	16.00	12.00	4.00
16	Grass	PAHA	11	55	0.00	3.36	1.68	1.68
19	Grass	AGSM	11	33	0.00	14.73	7.37	7.37
19	Grass	ANHA	11	33	0.00	31.55	15.77	15.77
22	Grass	CAREX	0	11	0.00	22.72	5.26	8.78
26	Forb	ERIOG	11	33	0.90	4.00	2.56	1.28
27	Forb	HYFL	33	55	0.00	4.10	1.37	1.93
27	Forb	LEFE	33	55	0.00	1.88	0.72	0.78
27	Forb	PPFF	33	55	2.00	4.00	3.10	0.83
28	Forb	AAFF	33	55	1.00	7.60	4.90	2.44
30	Shrub	YUCCA	33	55	50.00	280.00	165.00	115.00
30	Tree	YUEL	33	55	2.16	30.67	10.03	10.45
31	Shrub	GUSA2	11	33	20.97	336.40	104.58	98.54

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
34	Shrub	ARFI2	0	22	0.96	79.20	40.78	28.24
35	Shrub	PRGL2	0	22	5.00	88.44	41.11	31.51
39	Shrub	QUHA3	11	33	37.00	294.84	130.06	93.33



Production Lbs/Acre Trends

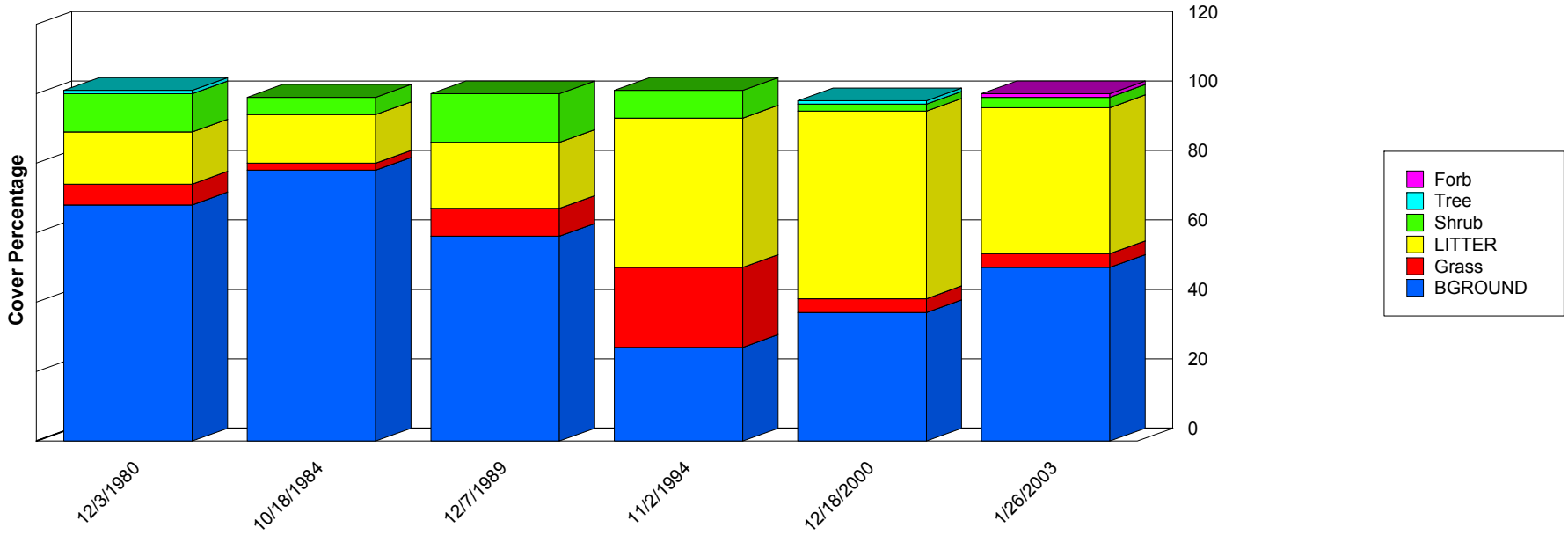


	12/3/1980	11/4/1981	10/21/1982	1/5/1984	10/18/1984	12/7/1989	11/2/1994	12/18/2000	1/26/2003
Forb	**8.00**	**5.98**	**3.60**	**0.00**	**21.00**	**6.00**	**4.00**	**7.60**	**11.07**
Grass	**233.00**	**448.82**	**86.30**	**115.58**	**238.00**	**253.00**	**243.00**	**303.27**	**167.70**
Shrub	**260.00**	**617.44**	**534.84**	**139.42**	**458.00**	**279.00**	**345.00**	**82.40**	**115.46**
Tree	**5.00**	**0.00**	**2.16**	**0.00**	**5.00**	**0.00**	**0.00**	**30.67**	**7.33**
Total	**506.00**	**1,072.24**	**626.90**	**255.00**	**722.00**	**538.00**	**592.00**	**423.93**	**301.56**

Report Parameters

SITE NAME LIKE	65034-WEST #6-D081
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/3/1980	10/18/1984	12/7/1989	11/2/1994	12/18/2000	1/26/2003
BGROUND	68.00	78.00	59.00	27.00	37.00	50.00
Forb	0.00	0.00	0.00	0.00	0.00	1.00
Grass	6.00	2.00	8.00	23.00	4.00	4.00
LITTER	15.00	14.00	19.00	43.00	54.00	42.00
Shrub	11.00	5.00	14.00	8.00	2.00	3.00
Tree	1.00	0.00	0.00	0.00	1.00	0.00
Total	101.00	99.00	100.00	101.00	98.00	100.00

Report Parameters

SITE NAME LIKE	65034-WEST #6-D081
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

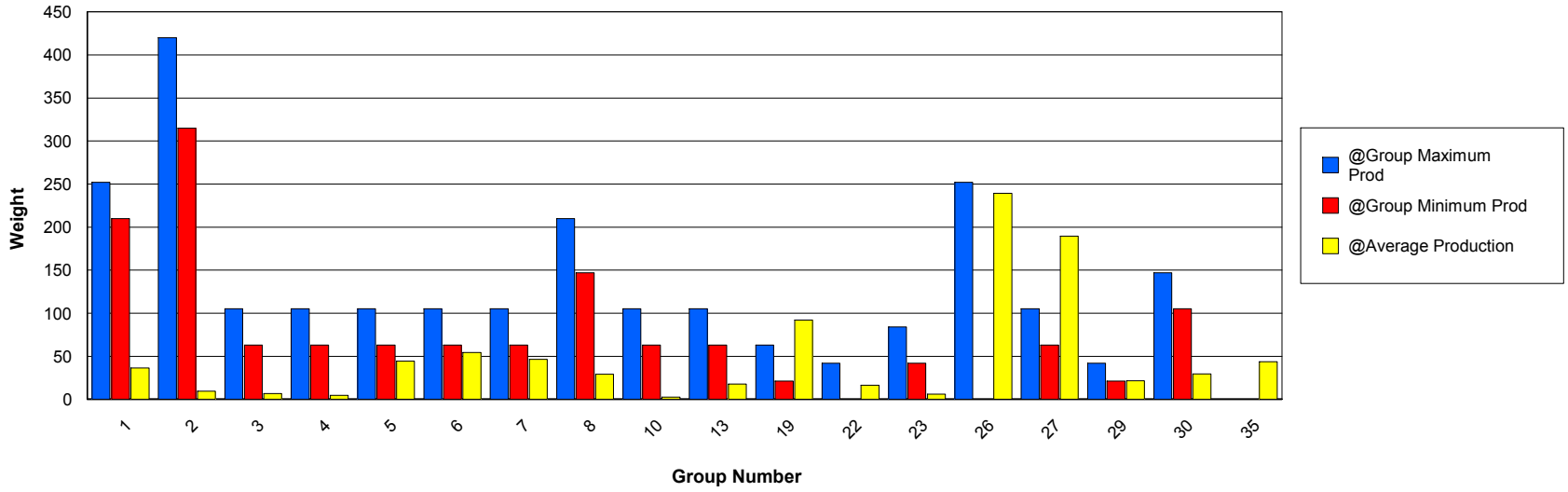
Functional / Structural Groups

Report Parameters

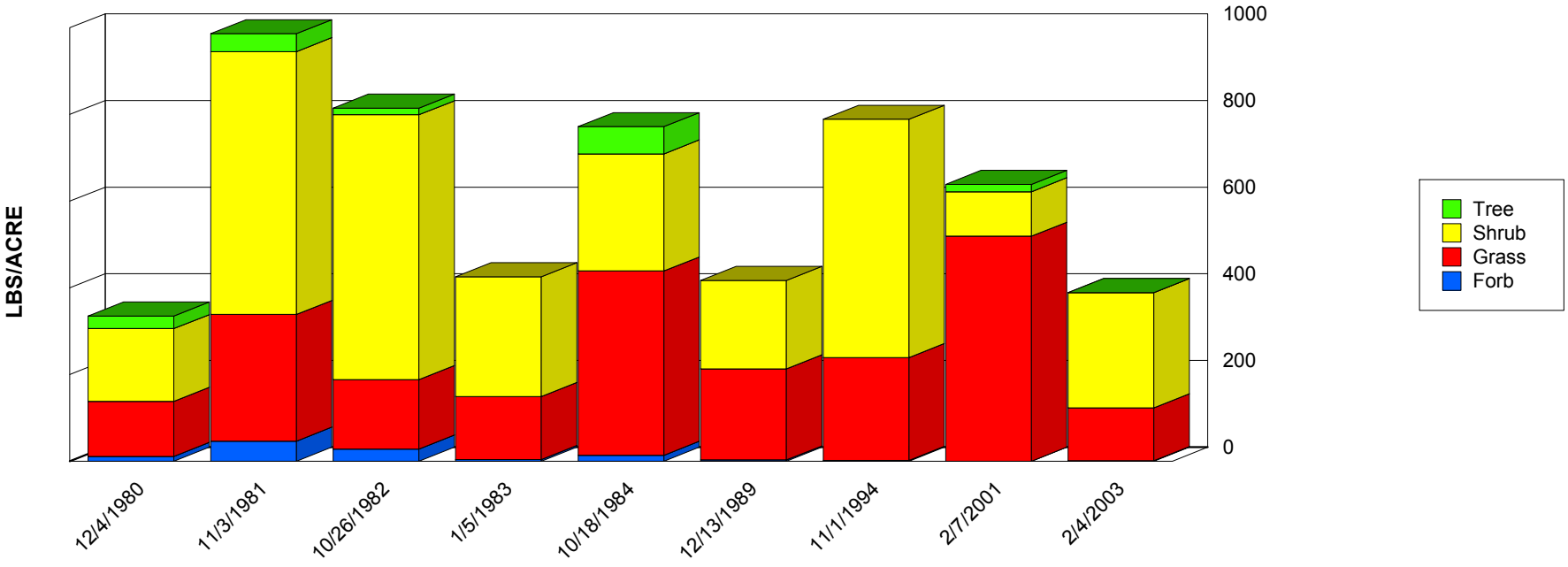
SITE NAME LIKE	65034-WHITE LAKES-D095
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005
MIN LBS TO GRAPH	2
SELECTED ECOSITE	070BY055NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	210	252	4.00	69.00	36.50	32.50
2	Grass	ANSC2	315	420	3.00	20.00	9.32	6.18
3	Grass	EROX	63	105	0.00	4.00	2.63	1.86
3	Grass	PAST6	63	105	0.00	8.00	4.00	4.00
4	Grass	SEMA5	63	105	3.33	6.00	4.67	1.33
5	Grass	BOHI2	63	105	7.00	174.17	44.48	49.17
6	Grass	ARIST	63	105	11.47	117.00	54.24	33.15
7	Grass	LECO	63	105	8.87	108.00	46.33	30.10
8	Grass	SPCR	147	210	3.00	57.00	29.02	16.51
10	Grass	BOER4	63	105	0.00	7.00	2.57	2.42
13	Grass	BOCU	63	105	4.00	38.00	17.71	10.03
19	Grass	AGSM	21	63	0.00	11.33	5.67	5.67
19	Grass	BOGR2	21	63	0.00	113.17	31.03	39.40
19	Grass	PAHA	21	63	0.00	2.00	1.00	1.00
19	Grass	PAOB	21	63	0.00	11.00	5.89	4.52
19	Grass	SPFL2	21	63	15.00	111.00	48.33	44.34
22	Forb	AMBRO	0	42	4.00	26.00	15.00	11.00
22	Forb	AMPS	0	42	0.00	4.02	1.34	1.90
23	Forb	AAFF	42	84	0.83	14.00	5.82	5.54
26	Shrub	QUHA3	0	252	72.00	611.16	239.25	183.23
27	Shrub	YUCCA	63	105	32.00	292.00	162.00	130.00
27	Tree	YUEL	63	105	0.00	63.00	27.50	20.32
29	Shrub	GUSA2	21	42	3.31	54.00	21.58	17.33
30	Shrub	ARFI2	105	147	4.37	76.00	29.56	27.34
35	Shrub	PRGL2	0	0	7.00	63.84	43.50	19.97

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV



Production Lbs/Acre Trends

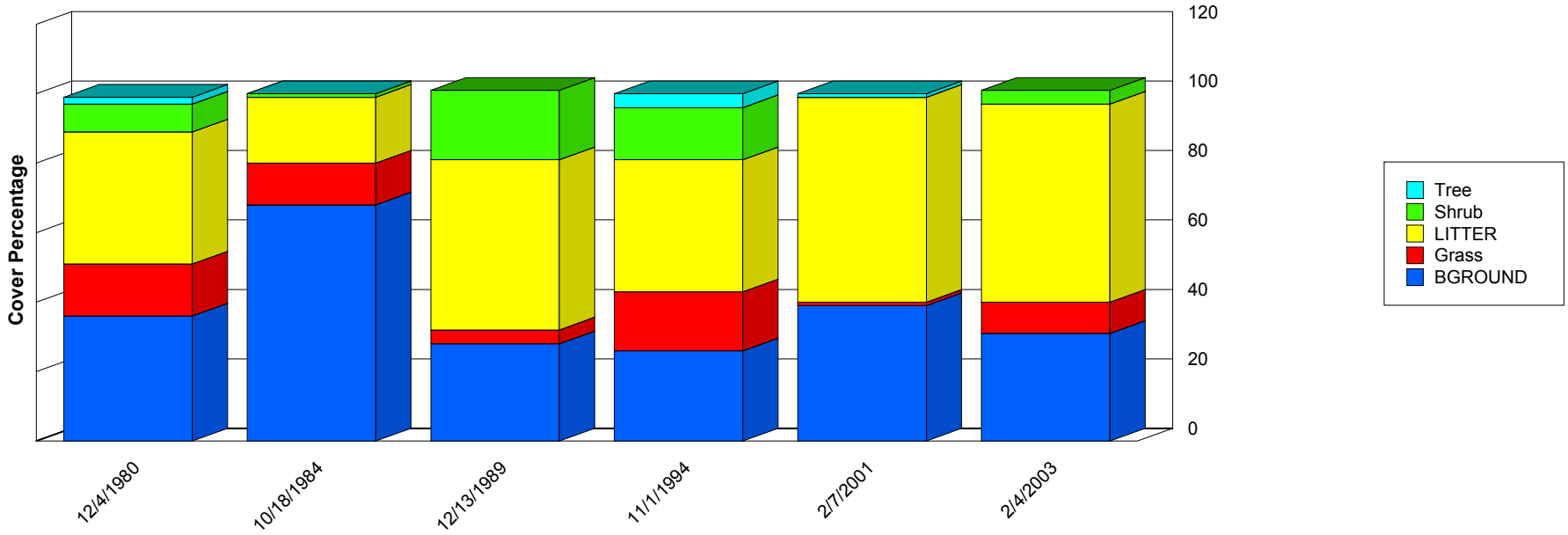


	12/4/1980	11/3/1981	10/26/1982	1/5/1983	10/18/1984	12/13/1989	11/1/1994	2/7/2001	2/4/2003
Forb	**11.00**	**46.18**	**27.92**	**4.02**	**14.00**	**3.00**	**2.00**	**0.00**	**1.40**
Grass	**127.00**	**292.38**	**160.26**	**145.06**	**425.00**	**210.00**	**237.00**	**519.11**	**122.03**
Shrub	**168.00**	**606.60**	**611.16**	**276.40**	**270.00**	**204.00**	**550.00**	**102.78**	**265.49**
Tree	**29.00**	**41.20**	**15.12**	**0.00**	**63.00**	**0.00**	**0.00**	**16.67**	**0.00**
Total	**335.00**	**986.36**	**814.46**	**425.48**	**772.00**	**417.00**	**789.00**	**638.55**	**388.93**

Report Parameters

SITE NAME LIKE	65034-WHITE LAKES-D095
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

Ground Cover Trends



	12/4/1980	10/18/1984	12/13/1989	11/1/1994	2/7/2001	2/4/2003
BGROUND	36.00	68.00	28.00	26.00	39.00	31.00
Grass	15.00	12.00	4.00	17.00	1.00	9.00
LITTER	38.00	19.00	49.00	38.00	59.00	57.00
Shrub	8.00	1.00	20.00	15.00	0.00	4.00
Tree	2.00	0.00	0.00	4.00	1.00	0.00
Total	99.00	100.00	101.00	100.00	100.00	101.00

Report Parameters

SITE NAME LIKE	65034-WHITE LAKES-D095
ON/AFTER	10/01/1980
ON/BEFORE	09/30/2005

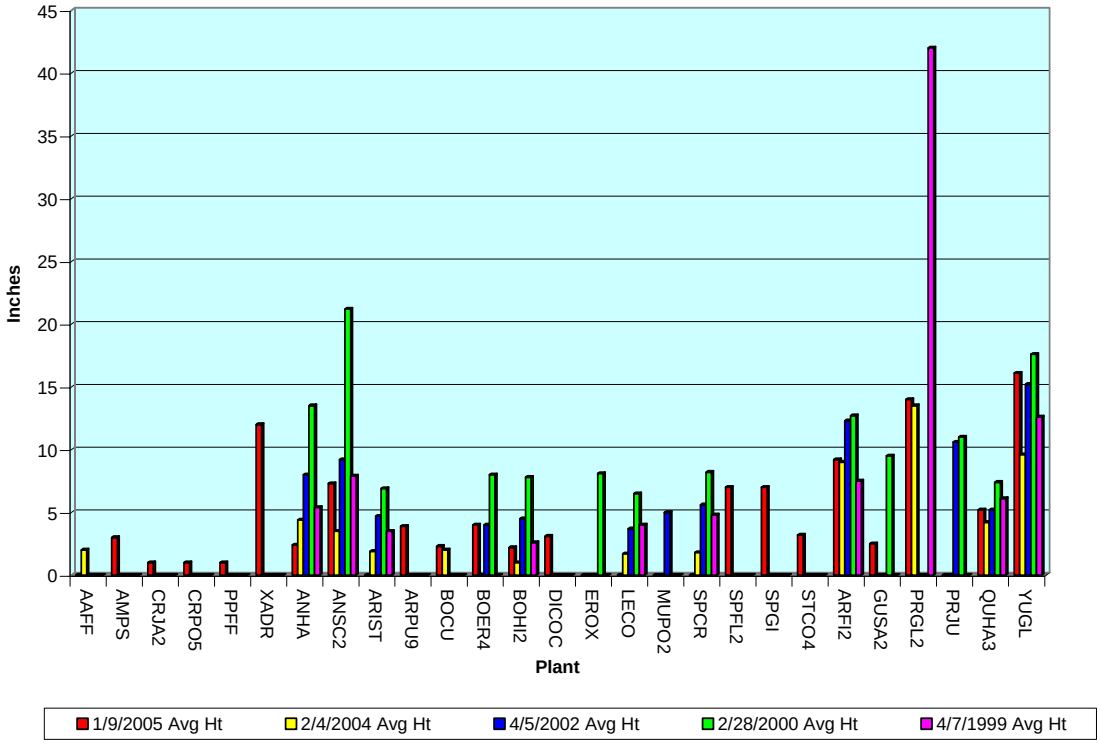
Robel Pole Summary over Time Report

Report Parameters
SITE NAME LIKE 65034-BIG HORN SAND-D097
ON/AFTER 10/01/1998
ON/BEFORE 09/30/2005

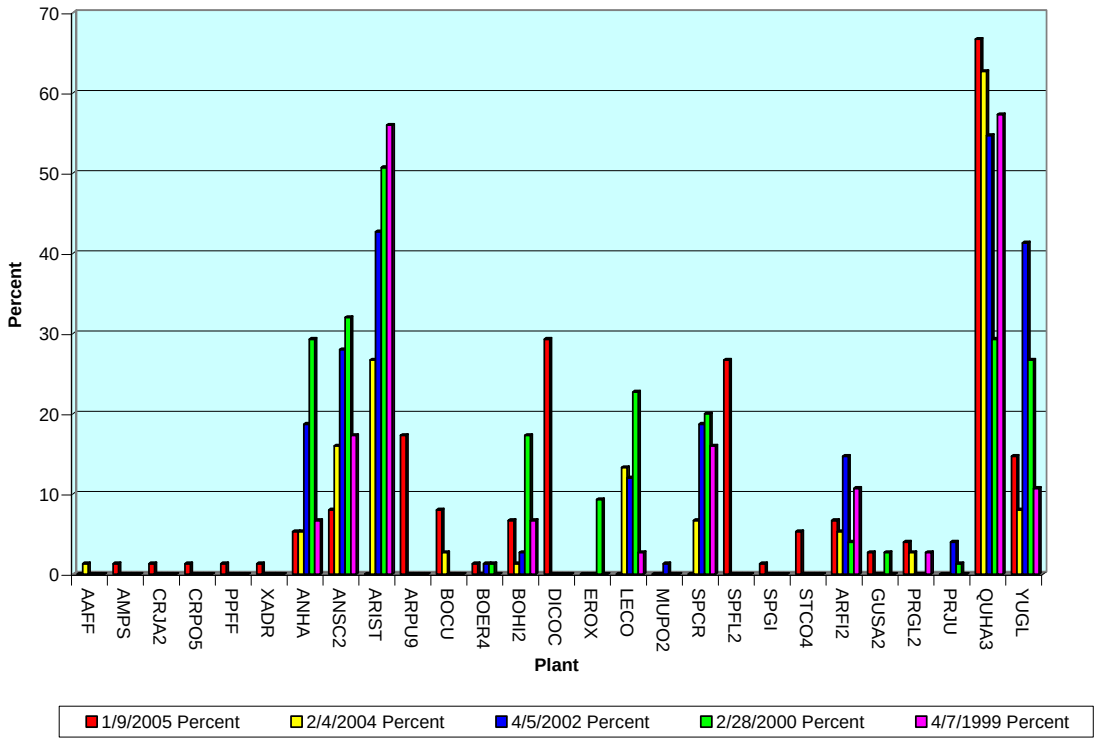
Primary Obstructions	**65034-BIG HORN SAND-D097**	**65034-BIG HORN SAND-D097**	**65034-BIG HORN SAND-D097**	**65034-BIG HORN SAND-D097**	**65034-BIG HORN SAND-D097**
	01/09/2005	**02/04/2004**	**04/05/2002**	**02/28/2000**	**04/07/1999**
Flag Stations	0	0	1	19	0
	% Hits	% Hits	% Hits	% Hits	% Hits
BGROUND	42.7 %	37.3 %	37.3 %	29.3 %	44.0 %
LITTER	41.3 %	41.3 %	44.0 %	46.7 %	33.3 %
ARFI2	0.0 %	2.7 %	0.0 %	1.3 %	0.0 %
QUHA3	4.0 %	8.0 %	0.0 %	0.0 %	2.7 %
YUGL	1.3 %	0.0 %	1.3 %	0.0 %	0.0 %
ANHA	1.3 %	0.0 %	1.3 %	2.7 %	2.7 %
ANSC2	0.0 %	2.7 %	4.0 %	2.7 %	2.7 %
ARIST	0.0 %	1.3 %	5.3 %	8.0 %	14.7 %
ARPU9	2.7 %	0.0 %	0.0 %	0.0 %	0.0 %
BOCU	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
BOER4	0.0 %	0.0 %	0.0 %	1.3 %	0.0 %
BOHI2	0.0 %	1.3 %	0.0 %	4.0 %	0.0 %
DICOC	4.0 %	0.0 %	0.0 %	0.0 %	0.0 %
EROX	0.0 %	0.0 %	0.0 %	1.3 %	0.0 %
LECO	0.0 %	4.0 %	2.7 %	2.7 %	0.0 %
MUPO2	0.0 %	0.0 %	1.3 %	0.0 %	0.0 %
SPCR	0.0 %	0.0 %	2.7 %	0.0 %	0.0 %
AAFF	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %
CRJA2	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %

Secondary Obstructions	65034-BIG HORN SAND-D097		65034-BIG HORN SAND-D097		65034-BIG HORN SAND-D097		65034-BIG HORN SAND-D097		65034-BIG HORN SAND-D097	
	01/09/2005		02/04/2004		04/05/2002		02/28/2000		04/07/1999	
	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht
AAFF	0.0	0.0	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0
AMPS	1.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANHA	5.3	2.4	5.3	4.4	18.7	8.0	29.3	13.5	6.7	5.4
ANSC2	8.0	7.3	16.0	3.5	28.0	9.2	32.0	21.2	17.3	7.9
ARFI2	6.7	9.2	5.3	9.0	14.7	12.3	4.0	12.7	10.7	7.5
ARIST	0.0	0.0	26.7	1.9	42.7	4.7	50.7	6.9	56.0	3.5
ARPU9	17.3	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCU	8.0	2.3	2.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0
BOER4	1.3	4.0	0.0	0.0	1.3	4.0	1.3	8.0	0.0	0.0
BOHI2	6.7	2.2	1.3	1.0	2.7	4.5	17.3	7.8	6.7	2.6
CRJA2	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CRPO5	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DICOC	29.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EROX	0.0	0.0	0.0	0.0	0.0	0.0	9.3	8.1	0.0	0.0
GUSA2	2.7	2.5	0.0	0.0	0.0	0.0	2.7	9.5	0.0	0.0
LECO	0.0	0.0	13.3	1.7	12.0	3.7	22.7	6.5	2.7	4.0
MUPO2	0.0	0.0	0.0	0.0	1.3	5.0	0.0	0.0	0.0	0.0
PPFF	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRGL2	4.0	14.0	2.7	13.5	0.0	0.0	0.0	0.0	2.7	42.0
PRJU	0.0	0.0	0.0	0.0	4.0	10.6	1.3	11.0	0.0	0.0
QUHA3	66.7	5.2	62.7	4.2	54.7	5.2	29.3	7.4	57.3	6.1
SPCR	0.0	0.0	6.7	1.8	18.7	5.6	20.0	8.2	16.0	4.8
SPFL2	26.7	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPGI	1.3	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STCO4	5.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XADR	1.3	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YUGL	14.7	16.1	8.0	9.6	41.3	15.2	26.7	17.6	10.7	12.6

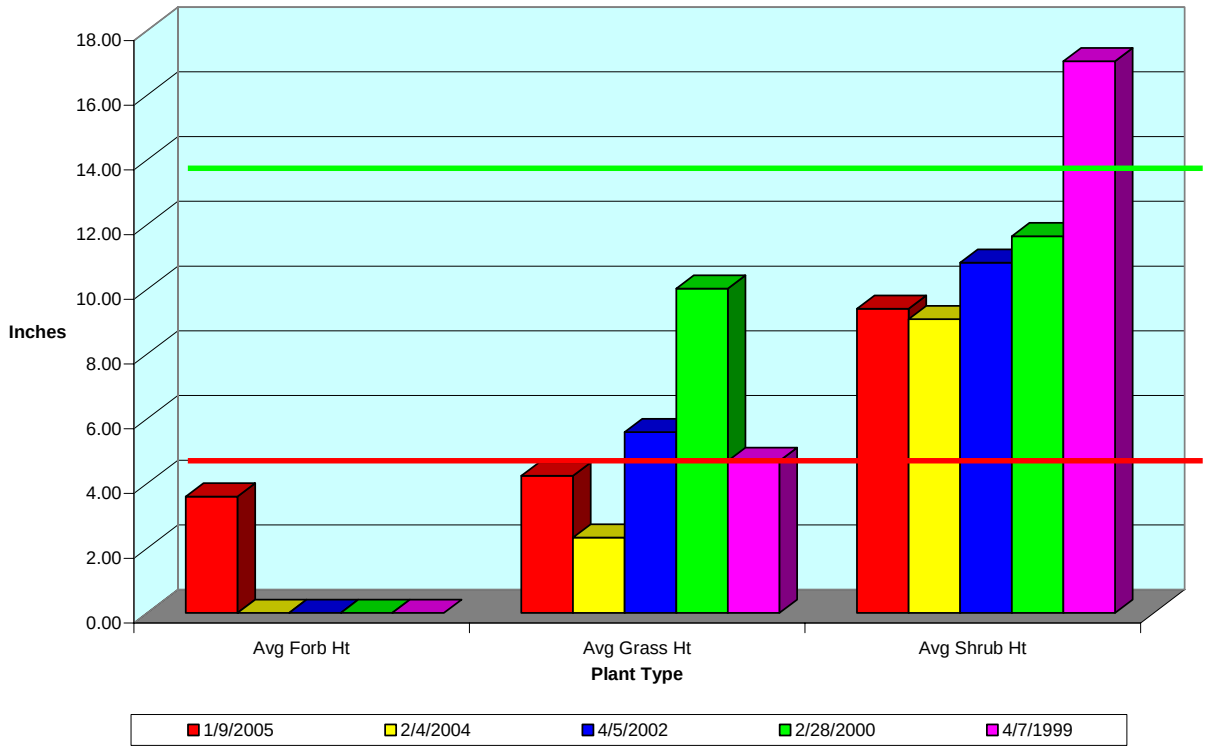
Average Visual Obstruction Height



Plant Composition



Plant Type Average Visual Obstruction Height



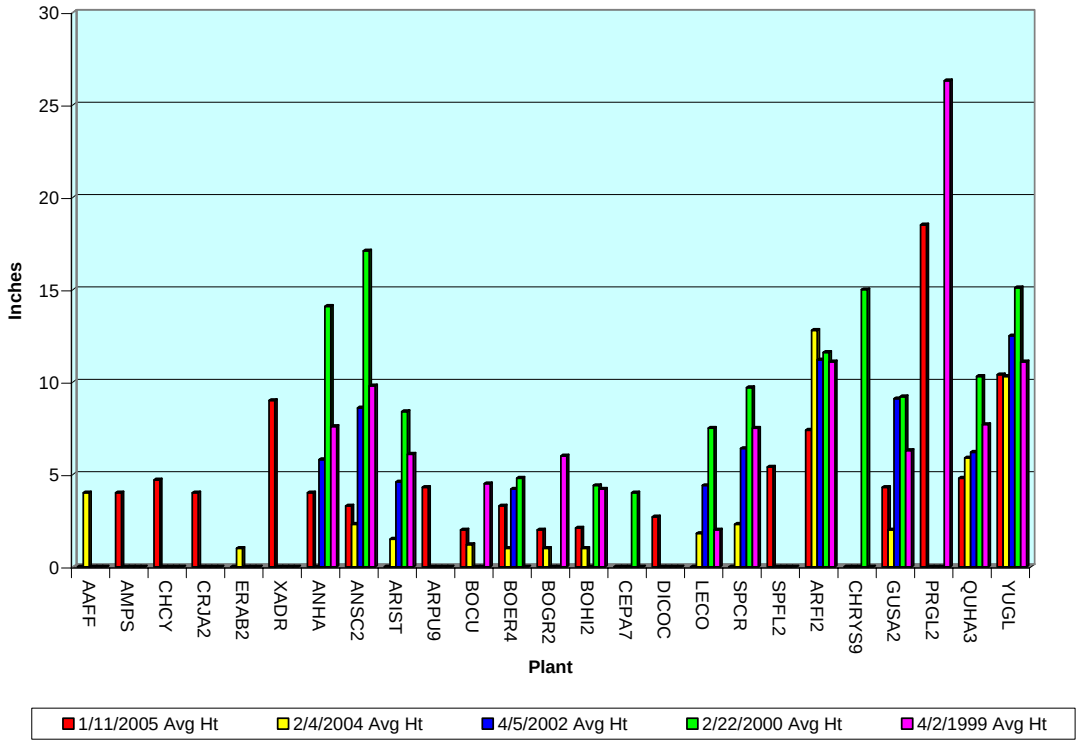
Robel Pole Summary over Time Report

Report Parameters
SITE NAME LIKE 65034-E. PRESLER #4-D079
ON/AFTER 10/01/1998
ON/BEFORE 09/30/2005

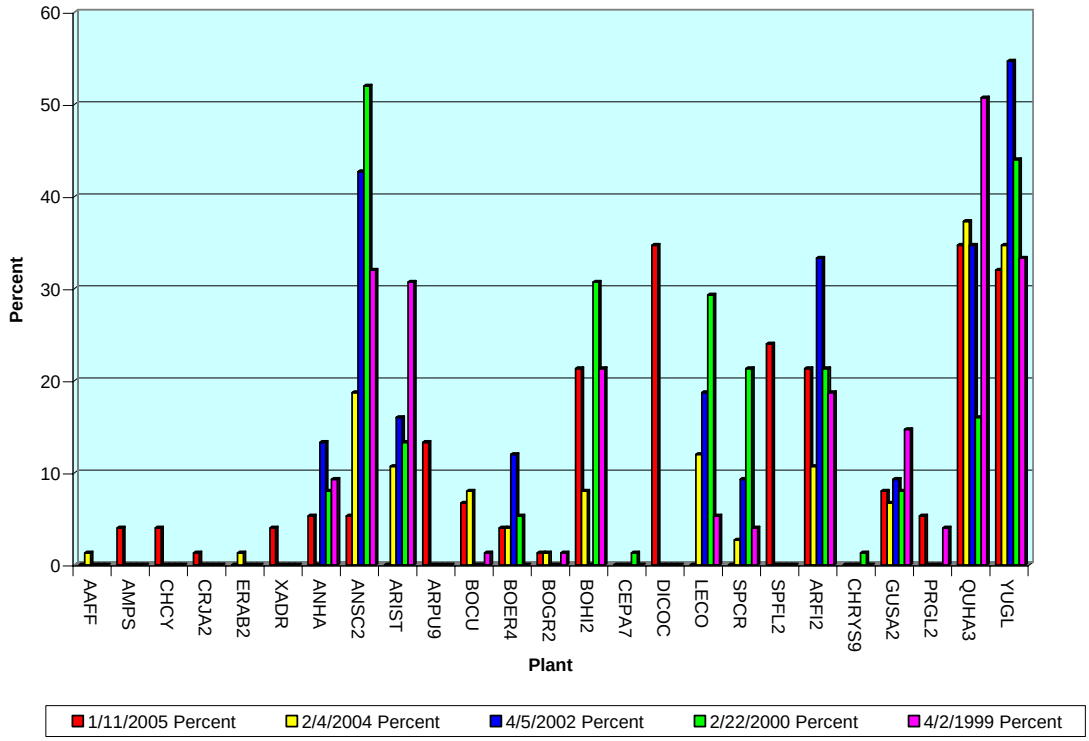
Primary Obstructions	**65034-E. PRESLER #4-D079**	**65034-E. PRESLER #4-D079**	**65034-E. PRESLER #4-D079**	**65034-E. PRESLER #4-D079**	**65034-E. PRESLER #4-D079**
	01/11/2005	**02/04/2004**	**04/05/2002**	**02/22/2000**	**04/02/1999**
Flag Stations	2	0	2	11	3
	% Hits	% Hits	% Hits	% Hits	% Hits
BGROUND	54.7 %	38.7 %	44.0 %	24.0 %	30.7 %
LITTER	29.3 %	41.3 %	37.3 %	56.0 %	29.3 %
ARFI2	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %
GUSA2	1.3 %	0.0 %	0.0 %	1.3 %	1.3 %
QUHA3	1.3 %	1.3 %	0.0 %	0.0 %	4.0 %
YUGL	1.3 %	1.3 %	0.0 %	0.0 %	2.7 %
ANHA	1.3 %	0.0 %	0.0 %	0.0 %	9.3 %
ANSC2	0.0 %	1.3 %	6.7 %	1.3 %	2.7 %
ARIST	0.0 %	2.7 %	6.7 %	0.0 %	5.3 %
BOCU	1.3 %	6.7 %	0.0 %	0.0 %	1.3 %
BOER4	0.0 %	0.0 %	4.0 %	4.0 %	0.0 %
BOGR2	0.0 %	0.0 %	0.0 %	0.0 %	1.3 %
BOHI2	1.3 %	1.3 %	0.0 %	6.7 %	5.3 %
DICOC	6.7 %	0.0 %	0.0 %	0.0 %	0.0 %
HILAR	0.0 %	0.0 %	0.0 %	0.0 %	1.3 %
LECO	0.0 %	2.7 %	1.3 %	6.7 %	4.0 %
SPCR	0.0 %	0.0 %	0.0 %	0.0 %	1.3 %
SPFL2	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
AAFF	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %

Secondary Obstructions	65034-E. PRESLER #4-D079		65034-E. PRESLER #4-D079		65034-E. PRESLER #4-D079		65034-E. PRESLER #4-D079		65034-E. PRESLER #4-D079	
	01/11/2005		02/04/2004		04/05/2002		02/22/2000		04/02/1999	
	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht
AAFF	0.0	0.0	1.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0
AMPS	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANHA	5.3	4.0	0.0	0.0	13.3	5.8	8.0	14.1	9.3	7.6
ANSC2	5.3	3.3	18.7	2.3	42.7	8.6	52.0	17.1	32.0	9.8
ARFI2	21.3	7.4	10.7	12.8	33.3	11.2	21.3	11.6	18.7	11.1
ARIST	0.0	0.0	10.7	1.5	16.0	4.6	13.3	8.4	30.7	6.1
ARPU9	13.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCU	6.7	2.0	8.0	1.2	0.0	0.0	0.0	0.0	1.3	4.5
BOER4	4.0	3.3	4.0	1.0	12.0	4.2	5.3	4.8	0.0	0.0
BOGR2	1.3	2.0	1.3	1.0	0.0	0.0	0.0	0.0	1.3	6.0
BOHI2	21.3	2.1	8.0	1.0	0.0	0.0	30.7	4.4	21.3	4.2
CEPA7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.0	0.0	0.0
CHCY	4.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHRYS9	0.0	0.0	0.0	0.0	0.0	0.0	1.3	15.0	0.0	0.0
CRJA2	1.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DICOC	34.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ERAB2	0.0	0.0	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0
GUSA2	8.0	4.3	6.7	2.0	9.3	9.1	8.0	9.2	14.7	6.3
LECO	0.0	0.0	12.0	1.8	18.7	4.4	29.3	7.5	5.3	2.0
PRGL2	5.3	18.5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	26.3
QUHA3	34.7	4.8	37.3	5.9	34.7	6.2	16.0	10.3	50.7	7.7
SPCR	0.0	0.0	2.7	2.3	9.3	6.4	21.3	9.7	4.0	7.5
SPFL2	24.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XADR	4.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YUGL	32.0	10.4	34.7	10.3	54.7	12.5	44.0	15.1	33.3	11.1

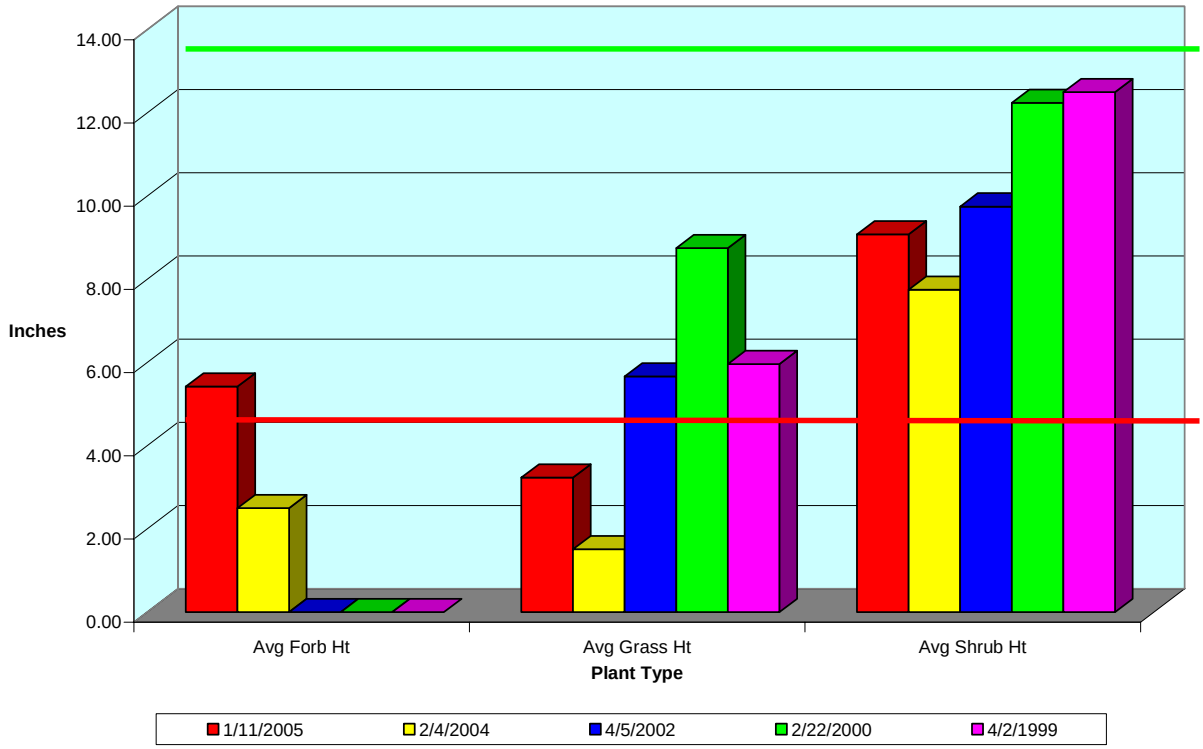
Average Visual Obstruction Height



Plant Composition



Plant Type Average Visual Obstruction Height



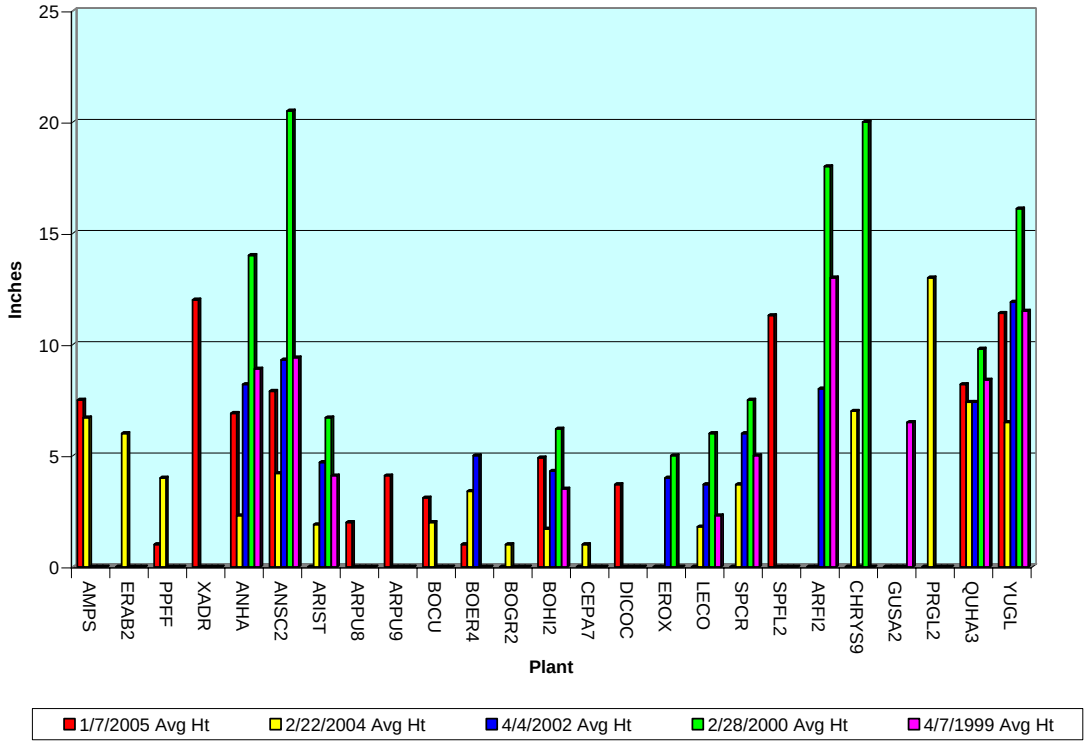
Robel Pole Summary over Time Report

Report Parameters
SITE NAME LIKE 65034-MESCALERO-D094
ON/AFTER 10/01/1998
ON/BEFORE 09/30/2005

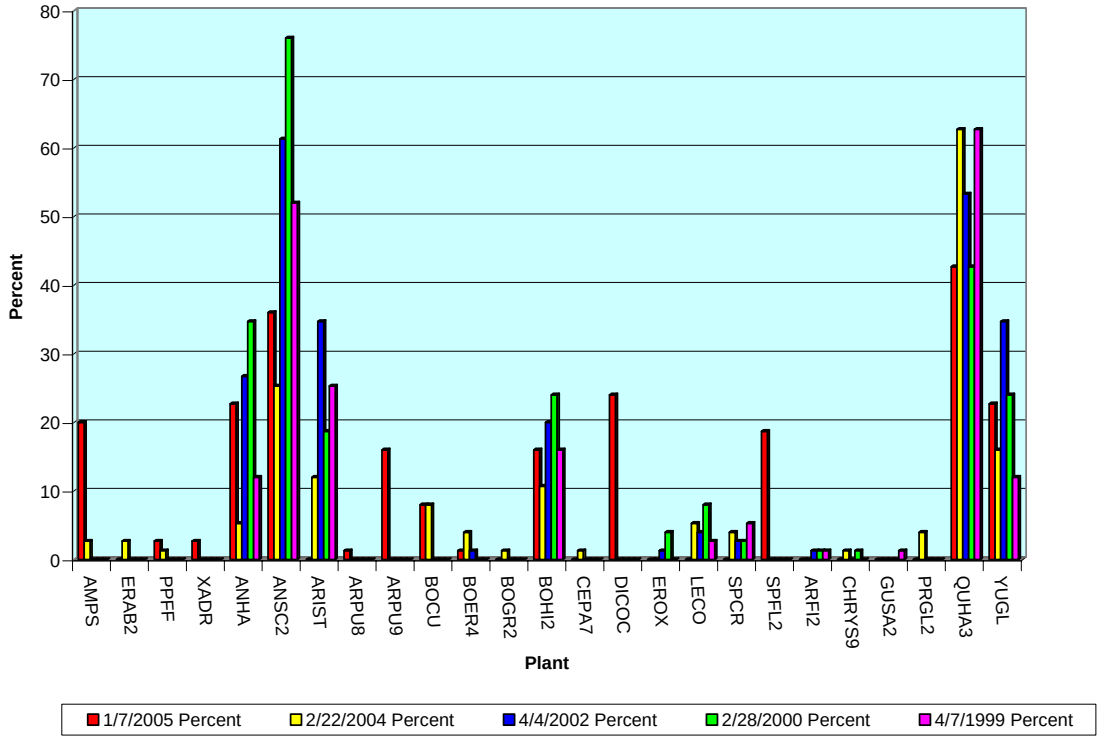
Primary Obstructions	**65034-MESCALERO-D094**	**65034-MESCALERO-D094**	**65034-MESCALERO-D094**	**65034-MESCALERO-D094**	**65034-MESCALERO-D094**
	01/07/2005	**02/22/2004**	**04/04/2002**	**02/28/2000**	**04/07/1999**
Flag Stations	2	0	0	33	4
	% Hits	% Hits	% Hits	% Hits	% Hits
BGROUND	32.0 %	42.7 %	30.7 %	32.0 %	36.0 %
LITTER	33.3 %	44.0 %	53.3 %	57.3 %	26.7 %
PRGL2	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %
QUHA3	4.0 %	1.3 %	0.0 %	0.0 %	5.3 %
YUGL	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %
ANHA	2.7 %	0.0 %	4.0 %	0.0 %	5.3 %
ANSC2	6.7 %	2.7 %	2.7 %	6.7 %	16.0 %
ARIST	0.0 %	0.0 %	6.7 %	0.0 %	4.0 %
ARPU9	4.0 %	0.0 %	0.0 %	0.0 %	0.0 %
BOCU	2.7 %	1.3 %	0.0 %	0.0 %	0.0 %
BOHI2	5.3 %	0.0 %	2.7 %	4.0 %	4.0 %
DICOC	5.3 %	0.0 %	0.0 %	0.0 %	0.0 %
LECO	0.0 %	4.0 %	0.0 %	0.0 %	1.3 %
SPFL2	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
AAFF	0.0 %	0.0 %	0.0 %	0.0 %	1.3 %
AMPS	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
ERAB2	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %
PPFF	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %

Secondary Obstructions	65034-MESCALERO-D094		65034-MESCALERO-D094		65034-MESCALERO-D094		65034-MESCALERO-D094		65034-MESCALERO-D094	
	01/07/2005		02/22/2004		04/04/2002		02/28/2000		04/07/1999	
	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht
AMPS	20.0	7.5	2.7	6.7	0.0	0.0	0.0	0.0	0.0	0.0
ANHA	22.7	6.9	5.3	2.3	26.7	8.2	34.7	14.0	12.0	8.9
ANSC2	36.0	7.9	25.3	4.2	61.3	9.3	76.0	20.5	52.0	9.4
ARFI2	0.0	0.0	0.0	0.0	1.3	8.0	1.3	18.0	1.3	13.0
ARIST	0.0	0.0	12.0	1.9	34.7	4.7	18.7	6.7	25.3	4.1
ARPU8	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARPU9	16.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCU	8.0	3.1	8.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
BOER4	1.3	1.0	4.0	3.4	1.3	5.0	0.0	0.0	0.0	0.0
BOGR2	0.0	0.0	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0
BOHI2	16.0	4.9	10.7	1.7	20.0	4.3	24.0	6.2	16.0	3.5
CEPA7	0.0	0.0	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0
CHRYS9	0.0	0.0	1.3	7.0	0.0	0.0	1.3	20.0	0.0	0.0
DICOC	24.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ERAB2	0.0	0.0	2.7	6.0	0.0	0.0	0.0	0.0	0.0	0.0
EROX	0.0	0.0	0.0	0.0	1.3	4.0	4.0	5.0	0.0	0.0
GUSA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	6.5
LECO	0.0	0.0	5.3	1.8	4.0	3.7	8.0	6.0	2.7	2.3
PPFF	2.7	1.0	1.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0
PRGL2	0.0	0.0	4.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0
QUHA3	42.7	8.2	62.7	7.4	53.3	7.4	42.7	9.8	62.7	8.4
SPCR	0.0	0.0	4.0	3.7	2.7	6.0	2.7	7.5	5.3	5.0
SPFL2	18.7	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XADR	2.7	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YUGL	22.7	11.4	16.0	6.5	34.7	11.9	24.0	16.1	12.0	11.5

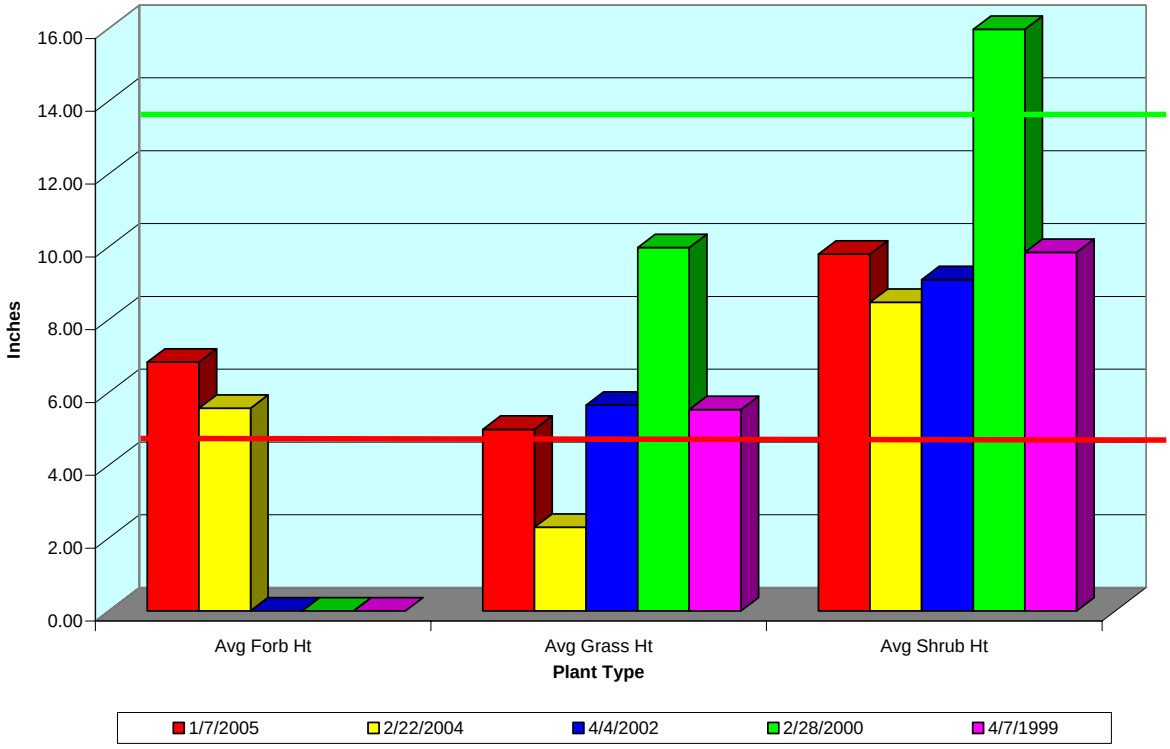
Average Visual Obstruction Height



Plant Composition



Plant Type Average Visual Obstruction Height



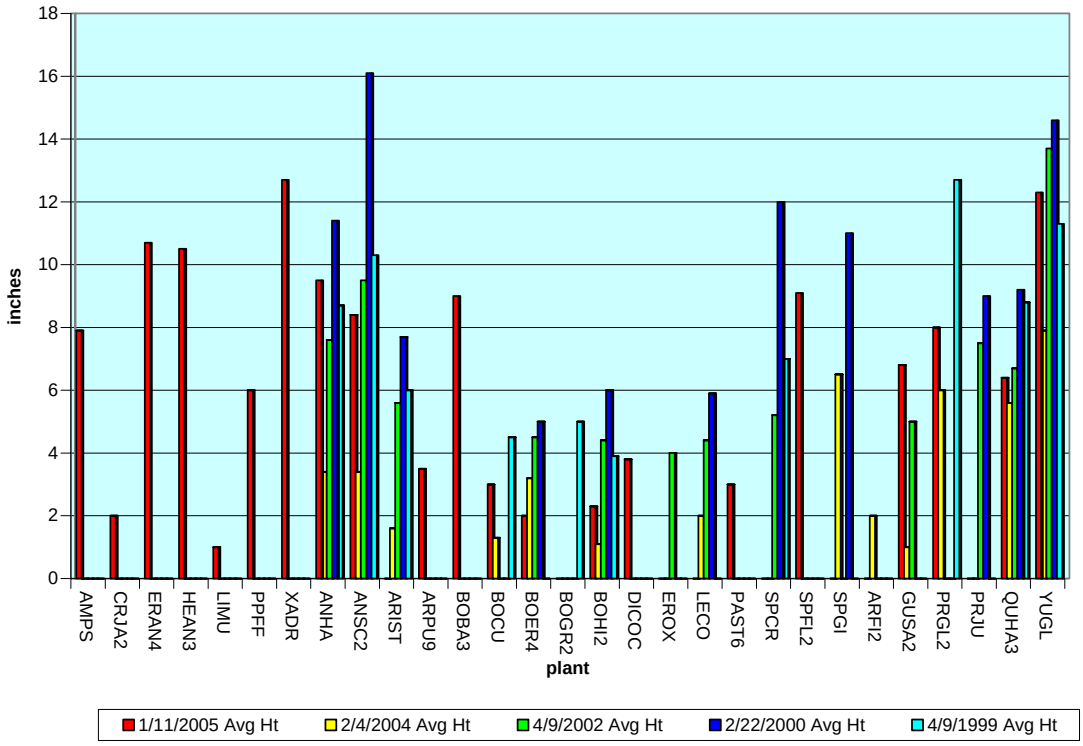
Robel Pole Summary over Time Report

Report Parameters
SITE NAME LIKE 65034-N. ANTELOPE #7-D082
ON/AFTER 10/01/1998
ON/BEFORE 09/30/2005

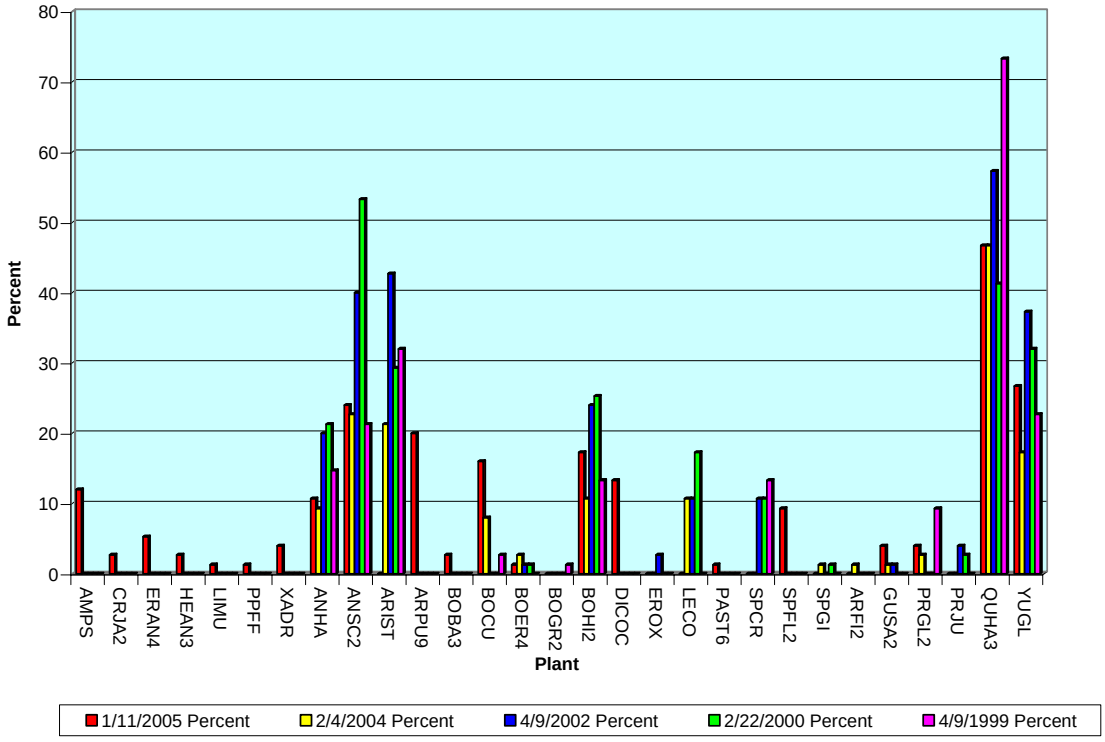
Primary Obstructions	**65034-N. ANTELOPE #7-D082**	**65034-N. ANTELOPE #7-D082**	**65034-N. ANTELOPE #7-D082**	**65034-N. ANTELOPE #7-D082**	**65034-N. ANTELOPE #7-D082**
	01/11/2005	**02/04/2004**	**04/09/2002**	**02/22/2000**	**04/09/1999**
Flag Stations	3	0	0	18	3
	% Hits	% Hits	% Hits	% Hits	% Hits
BGROUND	36.0 %	40.0 %	45.3 %	24.0 %	26.7 %
LITTER	44.0 %	25.3 %	37.3 %	61.3 %	36.0 %
PRGL2	1.3 %	0.0 %	0.0 %	0.0 %	1.3 %
QUHA3	2.7 %	6.7 %	0.0 %	0.0 %	8.0 %
YUGL	2.7 %	1.3 %	0.0 %	1.3 %	0.0 %
ANHA	1.3 %	2.7 %	1.3 %	0.0 %	8.0 %
ANSC2	2.7 %	5.3 %	5.3 %	8.0 %	4.0 %
ARIST	0.0 %	8.0 %	5.3 %	0.0 %	10.7 %
BOCU	1.3 %	2.7 %	0.0 %	0.0 %	0.0 %
BOGR2	0.0 %	0.0 %	0.0 %	0.0 %	1.3 %
BOHI2	4.0 %	2.7 %	2.7 %	2.7 %	2.7 %
DICOC	2.7 %	0.0 %	0.0 %	0.0 %	0.0 %
LECO	0.0 %	4.0 %	2.7 %	2.7 %	0.0 %
SPCR	0.0 %	0.0 %	0.0 %	0.0 %	1.3 %
SPGI	0.0 %	1.3 %	0.0 %	0.0 %	0.0 %
LIMU	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %

Secondary Obstructions	65034-N. ANTELOPE #7-D082		65034-N. ANTELOPE #7-D082		65034-N. ANTELOPE #7-D082		65034-N. ANTELOPE #7-D082		65034-N. ANTELOPE #7-D082	
	01/11/2005		02/04/2004		04/09/2002		02/22/2000		04/09/1999	
	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht
AMPS	12.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANHA	10.7	9.5	9.3	3.4	20.0	7.6	21.3	11.4	14.7	8.7
ANSC2	24.0	8.4	22.7	3.4	40.0	9.5	53.3	16.1	21.3	10.3
ARFI2	0.0	0.0	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0
ARIST	0.0	0.0	21.3	1.6	42.7	5.6	29.3	7.7	32.0	6.0
ARPU9	20.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOBA3	2.7	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCU	16.0	3.0	8.0	1.3	0.0	0.0	0.0	0.0	2.7	4.5
BOER4	1.3	2.0	2.7	3.2	1.3	4.5	1.3	5.0	0.0	0.0
BOGR2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.0
BOHI2	17.3	2.3	10.7	1.1	24.0	4.4	25.3	6.0	13.3	3.9
CRJA2	2.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DICOC	13.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ERAN4	5.3	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EROX	0.0	0.0	0.0	0.0	2.7	4.0	0.0	0.0	0.0	0.0
GUSA2	4.0	6.8	1.3	1.0	1.3	5.0	0.0	0.0	0.0	0.0
HEAN3	2.7	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LECO	0.0	0.0	10.7	2.0	10.7	4.4	17.3	5.9	0.0	0.0
LIMU	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAST6	1.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPFF	1.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRGL2	4.0	8.0	2.7	6.0	0.0	0.0	0.0	0.0	9.3	12.7
PRJU	0.0	0.0	0.0	0.0	4.0	7.5	2.7	9.0	0.0	0.0
QUHA3	46.7	6.4	46.7	5.6	57.3	6.7	41.3	9.2	73.3	8.8
SPCR	0.0	0.0	0.0	0.0	10.7	5.2	10.7	12.0	13.3	7.0
SPFL2	9.3	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPGI	0.0	0.0	1.3	6.5	0.0	0.0	1.3	11.0	0.0	0.0
XADR	4.0	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YUGL	26.7	12.3	17.3	7.9	37.3	13.7	32.0	14.6	22.7	11.3

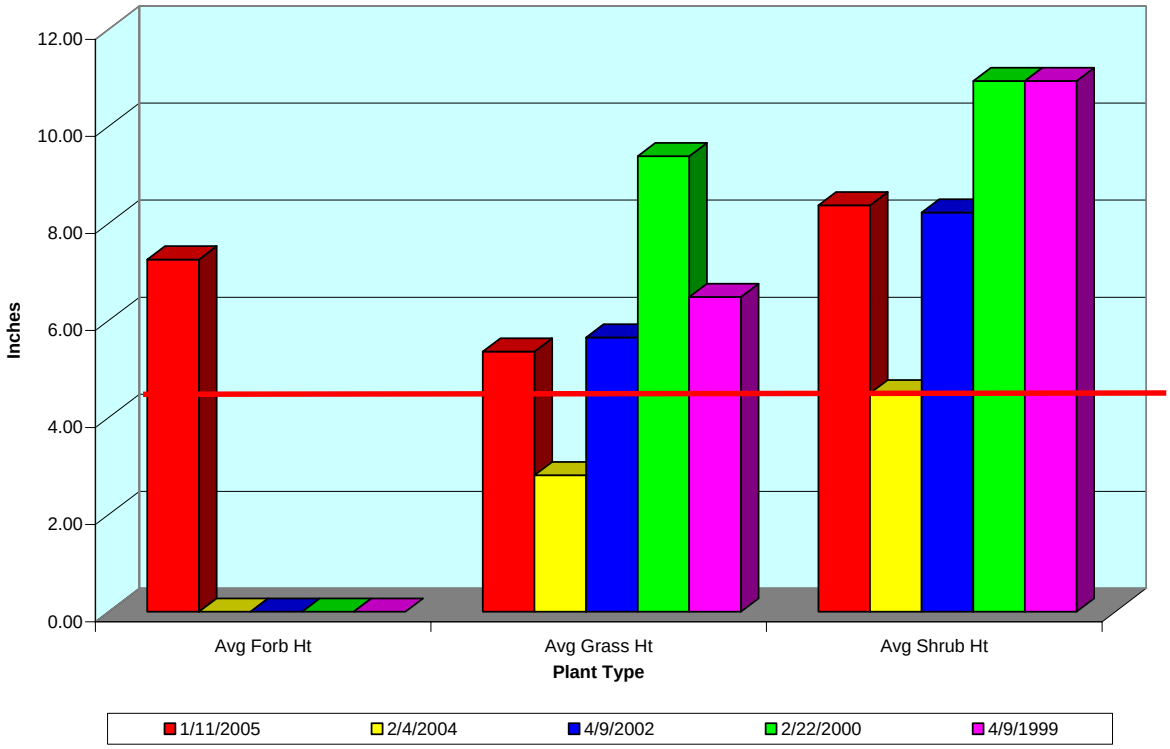
Average Visual Obstruction Height



Plant Composition



Plant Type Average Visual Obstruction Height



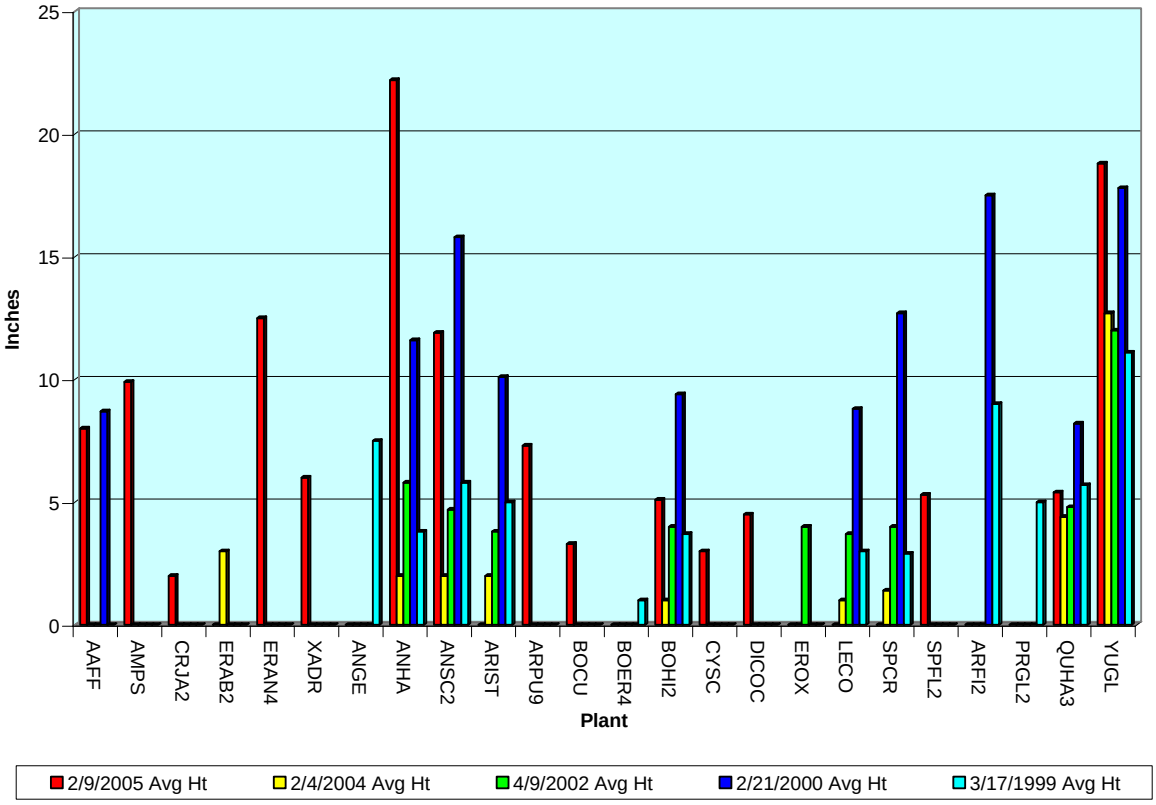
Robel Pole Summary over Time Report

Report Parameters
SITE NAME LIKE 65034-S. ANTELOPE #8-D083
ON/AFTER 01/01/1999
ON/BEFORE 12/31/2005

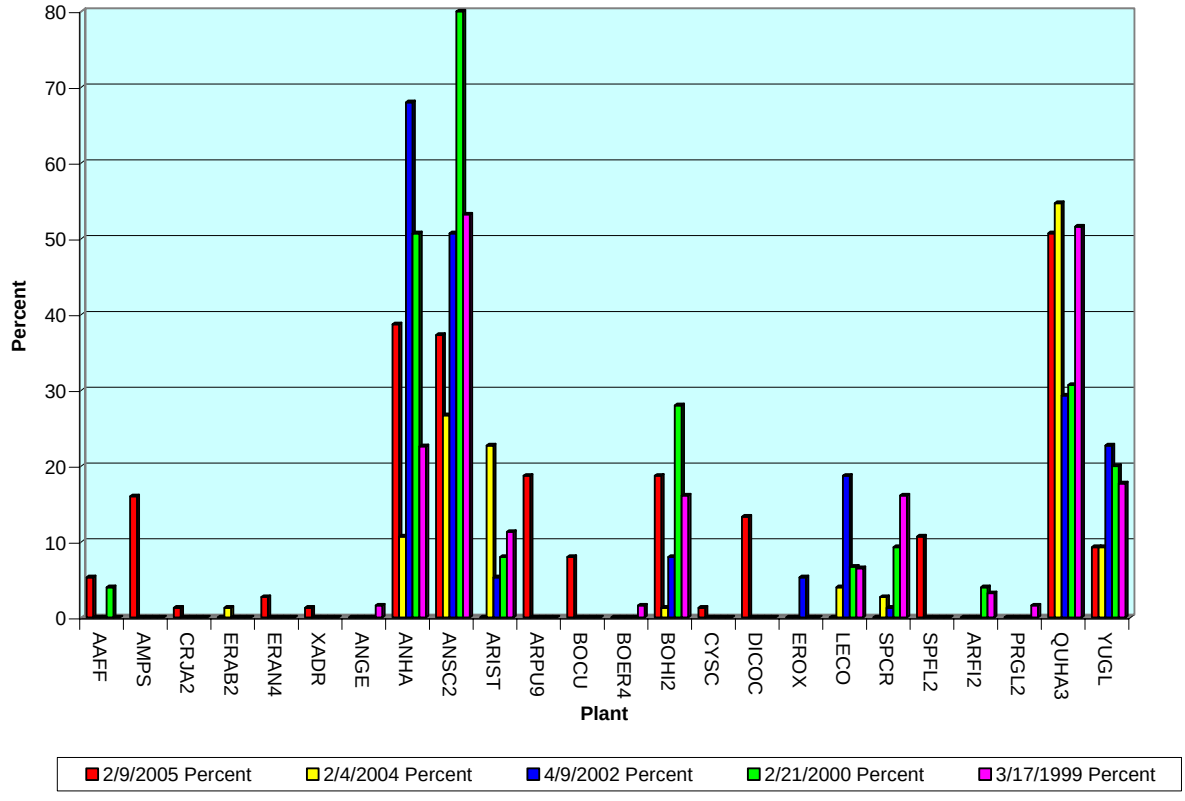
Primary Obstructions	**65034-S. ANTELOPE #8-D083**	**65034-S. ANTELOPE #8-D083**	**65034-S. ANTELOPE #8-D083**	**65034-S. ANTELOPE #8-D083**	**65034-S. ANTELOPE #8-D083**
	02/09/2005	**02/04/2004**	**04/09/2002**	**02/21/2000**	**03/17/1999**
Flag Stations	18	0	0	35	0
	% Hits	% Hits	% Hits	% Hits	% Hits
BGROUND	49.3 %	48.0 %	68.0 %	18.7 %	33.9 %
LITTER	36.0 %	26.7 %	21.3 %	62.7 %	40.3 %
QUHA3	4.0 %	10.7 %	0.0 %	0.0 %	1.6 %
YUGL	1.3 %	1.3 %	0.0 %	0.0 %	1.6 %
ANHA	1.3 %	4.0 %	1.3 %	2.7 %	6.5 %
ANSC2	2.7 %	5.3 %	5.3 %	10.7 %	4.8 %
ARIST	0.0 %	1.3 %	0.0 %	1.3 %	0.0 %
ARPU9	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
BOCU	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
BOER4	0.0 %	0.0 %	0.0 %	0.0 %	1.6 %
BOHI2	1.3 %	1.3 %	0.0 %	4.0 %	4.8 %
DICOC	1.3 %	0.0 %	0.0 %	0.0 %	0.0 %
LECO	0.0 %	0.0 %	4.0 %	0.0 %	0.0 %
SPCR	0.0 %	1.3 %	0.0 %	0.0 %	4.8 %

Secondary Obstructions	65034-S. ANTELOPE #8-D083		65034-S. ANTELOPE #8-D083		65034-S. ANTELOPE #8-D083		65034-S. ANTELOPE #8-D083		65034-S. ANTELOPE #8-D083	
	02/09/2005		02/04/2004		04/09/2002		02/21/2000		03/17/1999	
	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht	Percent	Avg Ht
AAFF	5.3	8.0	0.0	0.0	0.0	0.0	4.0	8.7	0.0	0.0
AMPS	16.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	7.5
ANHA	38.7	22.2	10.7	2.0	68.0	5.8	50.7	11.6	22.6	3.8
ANSC2	37.3	11.9	26.7	2.0	50.7	4.7	80.0	15.8	53.2	5.8
ARFI2	0.0	0.0	0.0	0.0	0.0	0.0	4.0	17.5	3.2	9.0
ARIST	0.0	0.0	22.7	2.0	5.3	3.8	8.0	10.1	11.3	5.0
ARPU9	18.7	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCU	8.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOER4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.0
BOHI2	18.7	5.1	1.3	1.0	8.0	4.0	28.0	9.4	16.1	3.7
CRJA2	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CYSC	1.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DICOC	13.3	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ERAB2	0.0	0.0	1.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0
ERAN4	2.7	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EROX	0.0	0.0	0.0	0.0	5.3	4.0	0.0	0.0	0.0	0.0
LECO	0.0	0.0	4.0	1.0	18.7	3.7	6.7	8.8	6.5	3.0
PRGL2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5.0
QUHA3	50.7	5.4	54.7	4.4	29.3	4.8	30.7	8.2	51.6	5.7
SPCR	0.0	0.0	2.7	1.4	1.3	4.0	9.3	12.7	16.1	2.9
SPFL2	10.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XADR	1.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YUGL	9.3	18.8	9.3	12.7	22.7	12.0	20.0	17.8	17.7	11.1

Average Visual Obstruction Height



Plant Composition



Plant Type Average Visual Obstruction Height